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WORK PLANS

2006 - Present

INVESTIGATION WORK PLAN

Group 2 (SWMU No. 2 Drum Storage Area North Bone Yard, SWMU No. 8 Inactive Landfill, SWMU No. 9 Landfill Pond, SWMU No. 11 Spray Irrigation Area, and SWMU No. 18 Warehouse Yard)



**Bloomfield Refinery
Giant Refining Company
Bloomfield, New Mexico**

December 2007



404 Camp Craft Road, Austin, Texas 78746
512-347-7588



Fed Ex Tracking # 8633 9179 3290

December 18, 2007

James Bearzi, Bureau Chief
New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Re: Giant Refining Company, Bloomfield Refinery Order No. HWB 07-34 (CO)
Solid Waste Management Unit (SWMU) Group No. 2 Investigation Work Plan

Dear Mr. Bearzi:

Giant Refining Company, Bloomfield Refinery submits the referenced Investigation Work Plan pursuant to Section IV.B.4 of the July 2007 HWB Order. The Investigation Work Plan covers SWMU Group No. 2, which includes SWMU No. 2 Drum Storage Area North Bone Yard; SWMU No. 8 Inactive Landfill; SWMU No. 9 Landfill pond; SWMU No. 11 Spray Irrigation Area; and SWMU No. 18 Warehouse Yard. The Investigation Work Plan was developed and formatted to meet the requirements of Section X.B of the July 2007 HWB Order.

If you have any questions or would like to discuss the Investigation Work Plan, please contact me at (505) 632-4171.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Schmaltz", is written over the typed name.

James R. Schmaltz
Environmental Manager
San Juan Refining Company
Bloomfield Refinery

cc: Hope Monzeglio – NMED HWB
Wayne Price – NMOCD (w/attachment)
Dave Cobrain – NMED HWB
Cheryl Frischkorn – NMED HWB
Laurie King – EPA Region 6 (w/attachment)
Todd Doyle – Bloomfield Refinery
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**Bloomfield Refinery
Giant Refining Company
#50 Rd 4990
Bloomfield, New Mexico 87413**

December 2007

A handwritten signature in black ink, appearing to read 'James R. Schmaltz', written over a horizontal line.

James R. Schmaltz
Environmental Manager
Giant Refining

A handwritten signature in black ink, appearing to read 'Scott T. Crouch', written over a horizontal line.

Scott T. Crouch, P.G.
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Table of Contents

List of Sections

Section 1	Introduction	1
Section 2	Background	3
2.1	SWMU No. 2 Drum Storage Area North Bone Yard.....	3
2.2	SWMU No. 8 Landfill.....	3
2.3	SWMU No. 9 Landfill Pond	4
2.4	SWMU No. 11 Spray Irrigation Area	5
2.5	SWMU No. 18 Warehouse Yard.....	6
Section 3	Site Conditions	8
3.1	Surface Conditions	8
3.2	Subsurface Conditions	9
Section 4	Scope of Services	10
4.1	Anticipated Activities.....	10
4.2	Background Information Research.....	10
4.3	Collection and Management of Investigation Derived Waste.....	10
4.4	Surveys	10
Section 5	Investigation Methods	12
5.1	Drilling Activities.....	12
5.2	Soil Sampling	12
5.2.1	Soil Sample Field Screening and Logging.....	14
5.2.2	Background Determination	15
5.3	Groundwater Water Monitoring.....	15
5.3.1	Groundwater Levels.....	15
5.3.2	Groundwater Sampling	16
5.3.3	Well Purging	16
5.3.4	Groundwater Sample Collection	17
5.4	Sample Handling	18
5.5	Decontamination Procedures.....	19
5.6	Field Equipment Calibration Procedures	20
5.7	Documentation of Field Activities	20
5.8	Chemical Analyses.....	21
5.9	Data Quality Objectives	23
Section 6	Monitoring and Sampling Program.....	25
6.1	Groundwater Monitoring.....	25
Section 7	Schedule	26

Table of Contents (Continued)

List of Tables

Table 1	Volatile Organic Ground Water Analytical Results Summary
Table 2	Total metals Ground Water Analytical Results Summary
Table 3	Dissolved Metals Ground Water Analytical Results Summary
Table 4	General Chemistry Ground Water Analytical Results Summary
Table 5	Volatile Organic Soil Analytical Results Summary
Table 6	Field Measurement Summary

List of Figures

Figure 1	Site Location Map
Figure 2	SWMU Group No. 2 Sample Locations
Figure 3	Cross Section A-A' West to East
Figure 4	Cross Section B-B' North to South
Figure 5	April 2007 Potentiometric Surface
Figure 6	Spring 2007 Separate Phase Hydrocarbon Thickness Map
Figure 7	Spring 2007 Dissolved-Phase Groundwater Data
Figure 8	SWMU No. 2 Sample Location Map
Figure 9	SWMU No. 8 Sample Location Map
Figure 10	SWMU No. 18 Sample Location Map

List of Appendices

Appendix A	Photographs
Appendix B	Landfill (SWMU No. 8) and Landfill Pond (SWMU No. 9 Historical Documentation
Appendix C	Spray Irrigation Area (SWMU No. 11) Historical Documentation
Appendix D	Investigation Derived Waste (IDW) Management Plan
Appendix E	Soil Survey Map

Executive Summary

The Bloomfield Refinery, which is located in the Four Corners Area of New Mexico, has been in operation since the late 1950s. Past inspections by State and federal environmental inspectors have identified locations where releases to the environment may have occurred. These locations are generally referred to as Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs).

Pursuant to the terms and conditions of an Order issued on July 27, 2007 by the New Mexico Environment Department (NMED) to San Juan Refining Company and Giant Industries Arizona, Inc. for the Bloomfield Refinery, this Investigation Work Plan has been prepared for the SWMUs designated as Group 2. This includes SWMU No. 2 Drum Storage Area North Bone Yard, SWMU No. 8 Inactive Landfill, SWMU No. 9 Landfill Pond, SWMU No. 11 Spray Irrigation Area, and SWMU No. 18 Warehouse Yard. The Order requires that San Juan Refining Company and Giant Industries Arizona, Inc. determine and evaluate the presence, nature, and extent of historical releases of contaminants at the aforementioned SWMUs.

The planned investigation activities include soil and groundwater samples, which will be collected and analyzed for potential site-related constituents. The specific sampling locations, sample collection procedures, and analytical methods are included. These activities are based, in part, on the results of previous site investigation activities. A review of historical documentation indicates that SWMU No. 9 Landfill Pond and SWMU No. 11 Spray Irrigation Area have already been closed by the NMED and thus no further action is proposed for these two areas.

1

Introduction

The Bloomfield Refinery is located immediately south of Bloomfield, New Mexico in San Juan County (Figure 1). The physical address is #50 Road 4990, Bloomfield, New Mexico 87413. The Bloomfield Refinery is located on 285 acres (0.45 square miles). Bordering the facility is a combination of federal and private properties. Public property managed by the Bureau of Land Management lies to the south. The majority of undeveloped land in the vicinity of the facility is used extensively for oil and gas production and, in some instances, grazing. U.S. Highway 44 is located approximately one-half mile west of the facility. The topography of the main portion of the site is generally flat with steep bluffs to the north where the San Juan River intersects Tertiary terrace deposits.

The Bloomfield Refinery is a crude oil refinery currently owned by the San Juan Refining Company and operated by Giant Industries Arizona, Inc., which is a wholly owned subsidiary of Western Refining Company. The Bloomfield Refinery has an approximate refining capacity of 18,000 barrels per day. Various process units are operated at the facility, including crude distillation, reforming, fluidized catalytic cracking, sulfur recovery, merox treater, catalytic polymerization and diesel hydrotreating. Current and past operations have produced gasoline, diesel fuels, jet fuels, kerosene, propane, butane, naphtha, residual fuel, fuel oils, and LPG.

On July 27, 2007, the New Mexico Environment Department (NMED) issued an Order to San Juan Refining Company and Giant Industries Arizona, Inc. ("Giant") requiring investigation and corrective action at the Bloomfield Refinery. This Investigation Work Plan has been prepared for the Solid Waste Management Units (SWMUs) designated as Group 2 in the Order. This includes:

- SWMU No. 2 Drum Storage Area North Bone Yard (North Bone Yard);
- SWMU No. 8 Inactive Landfill (Landfill);
- SWMU No. 9 Landfill Pond;
- SWMU No. 11 Spray Irrigation Area; and
- SWMU No. 18 Warehouse Yard.

The location of the individual SWMUs is shown on Figure 2 and all of the SWMUs except the Warehouse Yard are located at the far eastern end of the refinery property. The Warehouse Yard, is

located on the far western end of the property. Only two of the SWMUs (North Bone Yard and Warehouse Yard) are still actively used by Giant. The Landfill Pond and Spray Irrigation Area were previously closed by the NMED in January 1994 and August 1996, respectively. The Landfill has been inactive since 1989.

The purpose of the site investigation is to determine and evaluate the presence, nature, and extent of releases of contaminants in accordance with 20.4.1.500 New Mexico Administrative Code (NMAC) incorporating 40 Code of Federal Regulations (CFR) Section 264.101. The investigation activities will be conducted in accordance with Section IV of the Order.

2

Background

This section presents background information for each of the SWMUs, including a review of historical waste management activities for each location to identify the following:

- type and characteristics of all waste and all contaminants handled in the subject SWMU;
- known and possible sources of contamination;
- history of releases; and
- known extent of contamination.

2.1 SWMU No. 2 Drum Storage Area North Bone Yard

The North Bone Yard (Drum Storage Area) is located to the north of the fresh water pond and south of the Hammond Ditch. It is enclosed by a fence with a single entry point at the southwest corner and is used to store various pieces of equipment, including some scrap metal that is routinely shipped off-site for recycling. In addition, some empty drums may be temporarily stored in this area (see photos in Appendix A). No waste materials are currently managed in this area.

During an inspection conducted by EPA in 1984, several drums containing solvents and oils used in the refining process were noted as being stored in this area. The drums were removed from the North Bone Yard in July 1987 and placed in a designated drum storage area in the warehouse yard located on the west side of the refinery. There has not been a report of any releases from the drums in the North Bone Yard; however, there is no record of historical soil samples from this area. Monitoring well MW-1 is located within the North Bone Yard and numerous ground water samples have been collected and analyzed. The analytical results are included in Tables 1 – 4. There is no indication of ground water impacts at SWMU No. 2 based on the ground water analyses at MW-1.

2.2 SWMU No. 8 Landfill

The “landfill”, which has been identified as SWMU No. 8, is located to the east of the tank farm. In 1982, sludge was removed from the North and South Aeration Lagoons (known earlier as the North and South Oily Water Ponds) and disposed of in an off-site hazardous disposal facility. The underlying potentially contaminated soils, which were removed from beneath the North and South Aeration Lagoons, were placed in the landfill. The potential contaminants placed in the landfill in 1982 were formed during the secondary treatment of the refinery wastewaters and as such the types of and characteristics of the waste are well known. This includes the more prevalent types of

hydrocarbons (e.g., BTEX and semi-volatile organics) associated with crude oil and refined petroleum products and possibly inorganic contaminants (e.g., lead and chromium) that are utilized in or are byproducts of the refining process.

This area was investigated in 1985 to support preparation of a Closure Plan for the API Wastewater Ponds, Landfill and the Landfill Pond (related documentation in Appendix B). Eight soil samples were collected from across the area of the landfill and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX), phenolics, total chromium, and total lead. The results of these analyses are included in Table 5. As indicated, all analyses were non-detect with detection limits below the applicable action levels except for benzene, which was non-detect but had detection limits above the action level. There is no map of the actual sample locations but the area of the landfill was divided into quadrants and two samples from depths of 0-6" and 6-12" were collected from the center of each quadrant.

In 1989, approximately 2,000 yards of soil were excavated and stockpiled at one location within the landfill. This activity was taken to support closure of this area and in 1991 Bloomfield filed a petition for delisting of these stockpiled materials, which had earlier been classified as a listed hazardous waste (K051 – API separator sludge from the petroleum refining industry). The stock piled soils were sampled to support the delisting petition and the results are summarized in Table 4 of the Hazardous Waste Delisting Petition Petroleum Contaminated Soil document prepared by ERM-Rocky Mountain, Inc. in April 1991. The Environmental Protection Agency (EPA) granted the delisting petition, with an effective date of September 3, 1996. On February 25, 1998, the Oil Conservation Division approved the on-site disposal of these soils as fill material near the naphtha loading rack with the placement of clean soil as a cap.

There is no record of any other waste materials being placed in the landfill with the possible exception of minor quantities of catalyst fines and sulfur. The area is currently inactive as shown in the pictures in Appendix A. A review of the area indicates that there are no subsurface features in the area of the landfill (e.g., pipelines) that could affect contaminant migration.

2.3 SWMU No. 9 Landfill Pond

The Landfill Pond is located to the northeast of SWMU No. 8 Landfill and immediately east of SWMU No. 10 Fire Training Area (Figure 2). The "pond" was created when a shallow arroyo was blocked by the construction of the Hammond Irrigation Ditch. This area was designated as a SWMU due to the fact that it is topographically lower than the landfill and EPA was concerned that stormwater flowing from the landfill could have transported contaminants to this location. Wastes

have not historically been and are not today managed in this area. The potential contaminants that could have impacted this area are the same contaminants that were placed in the landfill (SWMU No. 8).

Seven soil samples were collected from the Landfill Pond in 1985. All of the samples were analyzed for BTEX, phenolics, total chromium, and total lead, and one of the samples was analyzed for the EPA Skinner List constituents. The results of these analyses are include on pages 7 – 16 of the Report of Analytical Results for Engineering Science Bloomfield Refining Company, which was prepared by Rocky Mountain Analytical Laboratory on May 28, 1986 (Appendix B). As indicated, all analyses were non-detect with the exception of chromium and lead, which had low concentrations below the action levels.

In 1986, a closure plan for the API Wastewater Ponds, Landfill, and Landfill Pond was completed. The closure plan documented that the existing conditions at the landfill pond were protective of human health and the environment and proposed no additional actions. The proposed closure plan was submitted for public comment from December 10, 1993 through January 9, 1994. One comment was received, which recommended that measures be taken to prevent water from ponding in the site for extended periods of time. NMED approved closure of the landfill pond on January 25, 1994 and noted that no changes were required to the proposed closure plan. The January 25, 1994 letter, a copy of which is included in Appendix B, stated the following, “No additional closure activities are required to demonstrate clean closure of the site.”

2.4 SWMU No. 11 Spray Irrigation Area

The Spray Irrigation Area is located across the road south of the landfill and east of Tank 45 (Figure 2). This area covered approximately 10 acres and was irrigated through stationary sprinkler heads with refinery wastewater pumped from the north evaporation pond. A dike was located around the area to prevent runoff. The irrigation activities were conducted from 1981 through 1994, primarily during the summer months (March to October). The irrigation activities stopped in 1995 when the Class 1 injection well was put into service. No other waste management activities were conducted in this location. The potential contaminants that may have impacted this area are the same petroleum refinery wastes discussed above for SWMUs No. 8 and 9.

A closure plan entitled, Closure Plan for the Unlined Evaporation Lagoons and the Spray Evaporation Area, was completed on August 13, 1996. A copy of the closure plan is included in Appendix C. The results of analytical testing on soil samples collected from the Spray Irrigation Area are discussed on pages 2 and 3 of the closure plan and are summarized in a table in Attachment C to the closure

plan. A map showing sample locations is included in Attachment B of the closure plan. On page 3 of the closure plan, Giant proposed to use the Spray Irrigation Area as the site for Giant's Pipeline and Transportation truck shop and office building. The activities associated with the construction were to include grading the area to eliminate the dikes. Otherwise, no additional activities were proposed. A monitoring well (MW-5) is located within the Spray Irrigation Area that is screened within the shallow aquifer but this well has been dry for at least the last six years. MW-3 is located immediately down-gradient of SWMU No. 11 and chemical analyses of ground water samples collected from MW-3 are summarized in Tables 1 – 3. These data do not indicate any impacts from the historical irrigation activities. Manganese was detected at low concentrations that are above the standard but it is likely these concentrations are representative of background concentrations. Similar manganese concentrations were detected in MW-8, which is also in an up-gradient location relative to site operations.

The NMED approved the Closure Plan for the Unlined Evaporation Lagoons and the Spray Evaporation Area on August 28, 1996 with the requirement to continue monitoring ground water at MW-1 and MW-5. As noted above, MW-5 is dry. A copy of the August 28, 1996 NMED letter is included in Appendix C.

2.5 SWMU No. 18 Warehouse Yard

The Warehouse Yard lies at the far western end of the refinery, west of the main office and warehouse buildings. It is enclosed on the east, south and west sides by a fence and is partially open to the refinery complex on the north side. During an inspection conducted in 1987, drums containing solvents and oils used in the refining process were noted as being stored within this area. Pictures of the former drum storage location are included in Appendix A. In 1988, the refinery changed its methods of storing bulk chemical products in drums to utilizing portafeed tanks and stainless-steel totes located within the process area. In addition, the drum storage area (drum storage rack) in the Warehouse Yard was upgraded by constructing a metal frame storage area with a concrete floor and curbing with a collection sump. After the upgrade, only drums containing primarily lube oils were stored in the original drum storage area. An above ground storage tank that contains gasoline is located within the yard and it has secondary containment. The warehouse yard has historically been used and is still primarily used today for shipping and receiving.

No soil samples have been collected for analysis from within the Warehouse Yard but there is one recovery well (RW-1). Separate phase hydrocarbon (SPH) has historically been present in RW-1; however, this well is located down-gradient of a larger area of ground water contamination that

extends from the refinery tank farm to the processing units. There is no currently available data to suggest the impacts to ground water are from any releases within the Warehouse Yard.

There is a liquid petroleum gas (LPG) pipeline and water line that runs along the western end of the warehouse yard but they are not close to the former drum storage location. There is a septic drain field in the area where the drums were originally stored.

3

Site Conditions

The conditions at the site, including surface and subsurface conditions that could affect the fate and transport of any contaminants, are discussed below. This information is based on recent visual observations and historical subsurface investigations.

3.1 Surface Conditions

Regionally, the surface topography slopes toward the floodplain of the San Juan River, which runs along the northern boundary of the refinery complex. To the south of the refinery, the drainage is to the northwest. North of the refinery, surface water flows in a southeasterly direction toward the San Juan River. The active portion of the refinery property, where the process units and storage tanks are located, is generally of low relief with an overall northwest gradient of approximately 0.02 ft/ft. The refinery sits on an alluvial floodplain terrace deposit and there is a steep bluff (approx. drop of 90 feet) at the northern boundary of the refinery where the San Juan River intersects the floodplain terrace, which marks the southern boundary of the floodplain.

There are two locally significant arroyos, one immediately east and another immediately west of the refinery, which collect most of the surface water flows in the area, thus significantly reducing surface water flows across the refinery. A minor drainage feature is located on the eastern portion of the refinery, where the Landfill Pond (SWMU No. 9) is located and there are several steep arroyos along the northern refinery boundary that primarily capture only local surface water flows and minor ground water discharges.

The refinery complex is bisected by County Rd #4990 (Sullivan Road), which runs east-west. The process units, storage tanks (crude oil and liquid products), and wastewater treatment systems are located north of the county road. The crude oil and product loading racks, LPG storage tanks and loading racks, maintenance buildings/90-day storage area, pipeline offices, transportation truck shop, and the Class I injection well are located south of the county road. There is very little vegetation throughout these areas with most surfaces composed of concrete, asphalt, or gravel. The area between the refinery and the San Juan River does have limited vegetation on slopes that are not too steep to support vegetation.

3.2 Subsurface Conditions

Numerous soil borings and monitoring wells have been completed across the refinery property during previous site investigations and installation of the slurry wall, which runs along the northern and western refinery boundary. Based on the available site-specific and regional subsurface information, the site is underlain by the Quaternary Jackson Lake terrace deposits, which unconformably overlie the Tertiary Nacimiento Formation. The Jackson Lake deposits consist of fine grained sand, silt and clay that grades to coarse sand, gravel and cobble size material closer to the contact with the Nacimiento Formation. The Jackson Lake Formation is over 40 feet thick near the southeast portion of the site and generally thins to the northwest toward the San Juan River. The Nacimiento Formation is primarily composed of fine grained materials (e.g., carbonaceous mudstone/claystone with interbedded sandstones) with a reported local thickness of approximately 570 feet (Groundwater Technology, 1994).

Figures six and seven present cross-sections of the shallow subsurface based on borings logs from on-site monitoring well completions. The uppermost aquifer is under water table conditions and occurs within the sand and gravel deposits of the Jackson Lake Formation. The Nacimiento Formation functions as an aquitard at the site and prevents site related contaminants from migrating to deeper aquifers. The potentiometric surface as measured in April 2007 is presented as Figure 5 and shows the groundwater flowing to the northwest, toward the San Juan River.

Previous site investigations have identified and delineated impacts to groundwater from historical site operations. Figure 6 shows the distribution of SPH in the subsurface based on the apparent thickness of SPH measured in monitoring wells. Dissolved-phase impacts are depicted on Figure 7.

4

Scope of Services

4.1 Anticipated Activities

Pursuant to Section IV of the Order, a scope of services was developed to determine and evaluate the presence, nature, extent, fate, and transport of contaminants. To accomplish this objective, soil borings and monitoring wells will be installed at the North Bone yard (SWMUs No. 2), the landfill (SWMU No. 8), and the Spray Irrigation Area (SWMU No. 11). Soil borings will be installed and samples collected as discussed in Section 5.2. The installation of monitoring wells and collection of groundwater samples is discussed in Section 5.3.

4.2 Background Information Research

Documents containing the results of previous investigations and subsequent routine groundwater monitoring data from monitoring wells were reviewed to facilitate development of this work plan. The previous collected data provides very good information on the overall subsurface conditions, including hydrogeology and contaminant distribution within groundwater. The data collected under this scope of services will supplement the existing groundwater information and provide SWMU-specific information regarding contaminant occurrence and distribution within soils.

4.3 Collection and Management of Investigation Derived Waste

Drill cuttings, excess sample material and decontamination fluids, and all other investigation derived waste (IDW) associated with soil borings will be contained and characterized using methods based on the boring location, boring depth, drilling method, and type of contaminants suspected or encountered. All purged groundwater and decontamination water will be characterized prior to disposal unless it is disposed in the refinery wastewater treatment system upstream of the API Separator. An IDW management plan is included as Appendix D.

4.4 Surveys

The horizontal coordinates and elevation of each surface sampling location; the surface coordinates and elevation of each boring or test pit, the top of each monitoring well casing, and the ground surface at each monitoring well location; and the locations of all other pertinent structures will be determined by a registered New Mexico professional land surveyor in accordance with the State Plane Coordinate System (NMSA.1978 47-1-49-56 (Repl. Pamp. 1993)). Alternate survey methods may be proposed by the Respondents in site specific work plans. Any proposed survey method must be approved by the Department prior to implementation. The surveys will be conducted in accordance with Sections 500.1

through 500.12 of the Regulations and Rules of the Board of Registration for Professional Engineers and Surveyors Minimum Standards for Surveying in New Mexico. Horizontal positions will be measured to the nearest 0.1-ft, and vertical elevations will be measured to the nearest 0.01-ft.

5

Investigation Methods

The purpose of the site investigation is to determine and evaluate the presence, nature, and extent of releases of contaminants. Guidance on selecting and developing sampling plans as provided in *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA, 2000) was utilized to select the appropriate sampling strategy for each of the SWMUs.

5.1 Drilling Activities

Soil and monitoring well borings will be drilled using either hollow-stem auger or if necessary, air rotary methods. Monitoring well construction/completions will be conducted in accordance with the requirements of Section IX of the Order. The preferred method will be hollow-stem auger to increase the ability to recover undisturbed samples and potential contaminants. The drilling equipment will be properly decontaminated before drilling each boring.

All soil borings will be drilled to a minimum depth of 10 feet with at least one boring at each of the individual potential source areas drilled to the top of saturation. Soil samples will be collected continuously and logged by a qualified geologist or engineer. If there is an indication of contamination based on field screening results at 10 feet, then the boring will be drilled deeper until no impacts are observed or to the top of saturation, whichever is achieved first.

The NMED will be notified as early as practicable if conditions arise or are encountered that do not allow the advancement of borings to the specified depths or at planned sampling locations. The drilling and sampling will be accomplished under the direction of a qualified engineer or geologist who will maintain a detailed log of the materials and conditions encountered in each boring. Both sample information and visual observations of the cuttings and core samples will be recorded on the boring log. Known site features and/or site survey grid markers will be used as references to locate each boring prior to surveying the location as described in Section 4.4. The boring locations will be measured to the nearest foot, and locations will be recorded on a scaled site map upon completion of each boring.

5.2 Soil Sampling

SWMU No. 2 includes the North Bone Yard and former drum storage area. The location where the drums, which contained solvents and lubricants, were stored in the past is known and is a relatively small area. Judgmental sampling will allow for sample collection at the known areas of potential impact, while a probability-based design could result in sample locations outside the area of concern.

A judgmental design will also allow for samples to be collected immediately beneath the area where empty drums are currently stored and scrap metal is stored on a temporary basis. There are no subsurface features (e.g., pipelines or utilities) that could affect contaminant distribution. As shown on Figure 8, three soil borings will be installed beneath the area where drums were formerly stored, two borings are to be located within the area currently used for storage of empty drums and three soil borings will be installed at the area used for scrap metal storage. If there are any visible indications of releases at the surface, then soil borings will be relocated to the specific identified areas.

SWMU No. 8 was a historic landfill area and there is no current information that would support a sample design based on judgmental samples. An appropriate sampling design to locate any areas of contamination within the area of the landfill is a systematic or grid sampling design. No subsurface utilities or pipelines cross this area. The individual sample locations have been selected by laying a grid (100' by 100') over the area where the landfill is located. Each boring will represent an area of approximately 10,000 square feet or one fourth of an acre. This is very conservative for a commercial/industrial facility and is less than the half-acre exposure area commonly used for residential properties (EPA, 1991 and EPA, 1996). This spacing results in 12 locations where soil borings will be installed, as shown on Figure 9.

The location where drums were stored on the ground at SWMU No. 18, prior to construction of the paved and covered drum storage rack facility, is shown on Figure 2. Because the location of drum storage is known and this is a small area that is only approximately 50 feet long and 30 feet wide judgmental samples will be collected. One of the on-site septic drain fields is located in this area and it is possible it could affect contaminant migration but the permeable nature of soils present on-site will lessen any influence from the drain field. Four soil borings will be located within this area and individual boring locations may be adjusted based on any visual indications of releases to surface soils (Figure 10).

A decontaminated split-barrel sampler or continuous five-foot core barrel will be used to obtain samples during the drilling of each boring. Surface samples may be collected using decontaminated, hand-held stainless steel sampling device, shelly tube, or thin-wall sampler, or a pre-cleaned disposable sampling device. A portion of the sample will be placed in pre-cleaned, laboratory-prepared sample containers for laboratory chemical analysis. The use of an Encore® Sampler or other similar device will be used during collection of soil samples for VOC analysis. The remaining portions of the sample will be used for logging and field screening as discussed in Section 5.2.1. Sample handling and chain-of-custody procedures will be in accordance with the procedures presented below in Section 5.4.

Discrete soil samples will be collected for laboratory analyses at the following intervals:

- 0-6" (all borings);
- 18-24" (all borings);
- from the 6" interval just above saturation (deep borings);
- the sample from each boring with the greatest apparent degree of contamination, based on field observations and field screening; and
- any additional intervals as determined based on field screening results.

Quality Assurance/Quality Control (QA/QC) samples will be collected to monitor the validity of the soil sample collection procedures as follows:

- field duplicates will be collected at a rate of 10 percent;
- equipment blanks will be collected from all sampling apparatus at a frequency of 10 percent or one per day if disposable sampling equipment is used; and
- field blanks will be collected at a frequency of one per day.

5.2.1 Soil Sample Field Screening and Logging

Samples obtained from the borings will be screened in the field for evidence of contaminants. Field screening results will be recorded on the exploratory boring and excavation logs. Field screening results will be used to aid in the selection of soil samples for laboratory analysis. The primary screening methods include: (1) visual examination, (2) olfactory examination, and (3) headspace vapor screening for volatile organic compounds. Additional screening for site- or release-specific characteristics such as pH or for specific compounds using field test kits may be conducted where appropriate.

Visual screening includes examination of soil samples for evidence of staining caused by petroleum-related compounds or other substances that may cause staining of natural soils such as elemental sulfur or cyanide compounds. Headspace vapor screening targets volatile organic compounds and involves placing a soil sample in a plastic sample bag or a foil sealed container allowing space for ambient air. The container will be sealed and then shaken gently to expose the soil to the air trapped in the container. The sealed container will be allowed to rest for a minimum of 5 minutes while vapors equilibrate. Vapors present within the sample bag's headspace will then be measured by inserting the probe of the instrument in a small opening in the bag or through the foil. The maximum value and the ambient air temperature will be recorded on the field boring or test pit log for each sample.

The monitoring instruments will be calibrated each day to the manufacturer's standard for instrument operation. A photo-ionization detector (PID) equipped with a 10.6 or higher electron volt (eV) lamp or a combustible gas indicator will be used for VOC field screening. Field screening results may be site-

and boring-specific and the results may vary with instrument type, the media screened, weather conditions, moisture content, soil type, and type of contaminant, therefore, all conditions capable of influencing the results of field screening will be recorded on the field logs.

The physical characteristics of the samples (such as mineralogy, ASTM soil classification, moisture content, texture, color, presence of stains or odors, and/or field screening results), depth where each sample was obtained, method of sample collection, and other observations will be recorded in the field log by a qualified geologist or engineer. Detailed logs of each boring will be completed in the field by a qualified engineer or geologist. Additional information, such as the presence of water-bearing zones and any unusual or noticeable conditions encountered during drilling, will be recorded on the logs.

5.2.2 Background Determination

Pursuant to Section VIII.H. of the Order, soil samples will be collected from the surface (0-6") and shallow subsurface (18-24") to establish background concentrations for inorganic constituents. Eight sample locations will be selected and two samples will be collected from each location to support the development of distinct background concentrations for surface and subsurface soils, if required. The area in which the samples will be collected is located immediately south of the transportation truck shop and the individual sample locations will be surveyed following the procedures in Section 4.4 (Figure 2).

The area chosen for background samples was selected based on the fact that no site-related or other industrial activities are known to have taken place in this area and based on a review of soil survey information. As shown on the soil survey map included in Appendix E, the same soil map unit (Doak-Avalon association) occurs across most of the refinery complex (NRCS, 2007). The area from which the background samples will be collected is within this same soil association. The two sample depths were selected based on the chemical soil properties reported in Appendix E, which show a slight variation with depth for the Doak-Avalon association soils.

5.3 Groundwater Water Monitoring

5.3.1 Groundwater Levels

Groundwater level and SPH thickness measurements will be obtained at each new monitoring well prior to purging in preparation for a sampling event. Measurement data and the date and time of each measurement will be recorded on a site monitoring data sheet. The depth to groundwater and SPH thickness levels will be measured to the nearest 0.01 ft. The depth to groundwater and SPH thickness

will be recorded relative to the surveyed well casing rim or other surveyed datum. A corrected water table elevation will be provided in wells containing SPH by adding 0.8 times the measured SPH thickness to the measured water table elevation. Groundwater and SPH levels will be measured in all wells within 48 hours of the start of obtaining water level measurements. All automated and manual extraction of SPH and water from recovery wells, observation wells, and collection wells, which is close enough to affect measurements at the new wells, will be discontinued for 48 hours prior to the measurement of water and product levels.

Groundwater level and SPH thickness measurements will also be obtained at each new monitoring well during the next regularly scheduled facility-wide groundwater sampling event to facilitate preparation of a facility-wide potentiometric surface map.

5.3.2 Groundwater Sampling

New monitoring wells will be installed at each of three SWMUs, which have not already been closed by the NMED. At North Bone Yard (SWMU No. 2) and the Warehouse Yard (SWMU No. 18), wells will be completed on the down-gradient side of areas where drums were historically stored.

Similarly, a well will be installed on the down-gradient side of the landfill (SWMU No. 8). In addition, if any other deep soil borings encounter groundwater, then a groundwater sample will be collected for analysis prior to plugging the boring.

Groundwater samples will initially be obtained from newly constructed monitoring wells no later than five days after the completion of well development. A second round of groundwater monitoring and sampling will be conducted no sooner than 30 days and not later than 75 days of the initial sampling event. Subsequent sampling events will be dependent upon the analytical results of the first two sampling events and as specified by the NMED. All monitoring wells scheduled for sampling during a groundwater sampling event will be sampled within 15 days of the start of the monitoring and sampling event. Groundwater samples will be collected from borings not intended to be completed as monitoring wells prior to abandonment of the borings, if ground water is encountered.

5.3.3 Well Purging

All zones in each monitoring well will be purged by removing groundwater prior to sampling in order to ensure that formation water is being sampled. Purge volumes will be determined by monitoring, at a minimum, groundwater pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and temperature after every two gallons or each well volume, whichever is less, has been purged from the well. Purging will continue, as needed, until the specific conductance, pH, and temperature readings are within 10 percent between readings for three consecutive measurements. Field

water quality parameters will also be compared to historical data provided in Table 6 to ensure that the measurements are indicative of formation water. The volume of groundwater purged, the instruments used, and the readings obtained at each interval will be recorded on the field-monitoring log. Well purging may also be conducted in accordance with the NMED's Position Paper *Use of Low-Flow and other Non-Traditional Sampling Techniques for RCRA Compliant Groundwater Monitoring* (October 30, 2001, as updated).

5.3.4 Groundwater Sample Collection

Groundwater samples will be collected within 24 hours of the completion of well purging. Sample collection methods will be documented in the field monitoring reports. The samples will be transferred to the appropriate, clean, laboratory-prepared containers provided by the analytical laboratory. Sample handling and chain-of-custody procedures will be in accordance with the procedures presented below in Section 5.3.5.

Groundwater samples intended for metals analysis will be submitted to the laboratory as total metals samples. QA/QC samples will be collected to monitor the validity of the groundwater sample collection procedures as follows:

- Field duplicate water samples will be obtained at a frequency of ten percent, with a minimum, of one duplicate sample per sampling event;
- Field blanks will be obtained at a minimum frequency of one per day per site or unit. Field blanks will be generated by filling sample containers in the field with deionized water and submitting the samples, along with the groundwater samples, to the analytical laboratory for the appropriate analyses.
- Equipment rinsate blanks will be obtained for chemical analysis at the rate of ten percent or a minimum of one rinsate blank per sampling day. Equipment rinsate blanks will be collected at a rate of one per sampling day if disposable sampling equipment is used. Rinsate samples will be generated by rinsing deionized water through unused or decontaminated sampling equipment. The rinsate sample will be placed in the appropriate sample container and submitted with the groundwater samples to the analytical laboratory for the appropriate analyses.
- Trip blanks will accompany laboratory sample bottles and shipping and storage containers intended for VOC analyses. Trip blanks will consist of a sample of analyte-free deionized water prepared by the laboratory and placed in an appropriate sample container. The trip blank

will be prepared by the analytical laboratory prior to the sampling event and will be kept with the shipping containers and placed with other water samples obtained from the site each day. Trip blanks will be analyzed at a frequency of one for each shipping container of samples to be analyzed for VOCs.

5.4 Sample Handling

At a minimum, the following procedures will be used at all times when collecting samples during investigation, corrective action, and monitoring activities:

1. Neoprene, nitrile, or other protective gloves will be worn when collecting samples. New disposable gloves will be used to collect each sample;
2. All samples collected of each medium for chemical analysis will be transferred into clean sample containers supplied by the project analytical laboratory with the exception of soil, rock, and sediment samples obtained in Encore® samplers. Sample container volumes and preservation methods will be in accordance with the most recent standard EPA and industry accepted practices for use by accredited analytical laboratories. Sufficient sample volume will be obtained for the laboratory to complete the method-specific QC analyses on a laboratory-batch basis; and
3. Sample labels and documentation will be completed for each sample following procedures discussed below. Immediately after the samples are collected, they will be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described below, will be followed for all samples collected. All samples will be submitted to the laboratory soon enough to allow the laboratory to conduct the analyses within the method holding times. At a minimum, all samples will be submitted to the laboratory within 48 hours after their collection.

Chain-of-custody and shipment procedures will include the following:

1. Chain-of-custody forms will be completed at the end of each sampling day, prior to the transfer of samples off site.
2. Individual sample containers will be packed to prevent breakage and transported in a sealed cooler with ice or other suitable coolant or other EPA or industry-wide accepted method.

The drainage hole at the bottom of the cooler will be sealed and secured in case of sample container leakage. Temperature blanks will be included with each shipping container.

3. Each cooler or other container will be delivered directly to the analytical laboratory.
4. Glass bottles will be separated in the shipping container by cushioning material to prevent breakage.
5. Plastic containers will be protected from possible puncture during shipping using cushioning material.
6. The chain-of-custody form and sample request form will be shipped inside the sealed storage container to be delivered to the laboratory.
7. Chain-of-custody seals will be used to seal the sample-shipping container in conformance with EPA protocol.
8. Signed and dated chain-of-custody seals will be applied to each cooler prior to transport of samples from the site.
9. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody form will be signed as received by the laboratory, and the conditions of the samples will be recorded on the form. The original chain-of-custody form will remain with the laboratory and copies will be returned to the relinquishing party.
10. Copies of all chain-of-custody forms generated as part of sampling activities will be maintained on-site.

5.5 Decontamination Procedures

The objective of the decontamination procedures is to minimize the potential for cross-contamination. A designated decontamination area will be established for decontamination of drilling equipment, reusable sampling equipment and well materials. The drilling rig will be decontaminated prior to entering the site or unit. Drilling equipment or other exploration equipment that may come in contact with the borehole will be decontaminated by steam cleaning, by hot-water pressure washing, or by other methods approved by the Department prior to drilling each new boring.

Sampling or measurement equipment, including but not limited to, stainless steel sampling tools, split-barrel or core samplers, well developing or purging equipment, groundwater quality measurement

instruments, and water level measurement instruments, will be decontaminated in accordance with the following procedures or other methods approved by the Department before each sampling attempt or measurement:

1. Brush equipment with a wire or other suitable brush, if necessary or practicable, to remove large particulate matter;
2. Rinse with potable tap water;
3. Wash with nonphosphate detergent or other detergent approved by the Department (examples include Fantastik™, Liqui-Nox®);
4. Rinse with potable tap water; and
5. Double rinse with deionized water.

All decontamination solutions will be collected and stored temporarily as described in Section 4.3. Decontamination procedures and the cleaning agents used will be documented in the daily field log.

5.6 Field Equipment Calibration Procedures

Field equipment requiring calibration will be calibrated to known standards, in accordance with the manufacturers' recommended schedules and procedures. At a minimum, calibration checks will be conducted daily, or at other intervals approved by the Department, and the instruments will be recalibrated, if necessary. Calibration measurements will be recorded in the daily field logs. If field equipment becomes inoperable, its use will be discontinued until the necessary repairs are made. In the interim, a properly calibrated replacement instrument will be used.

5.7 Documentation of Field Activities

Daily field activities, including observations and field procedures, will be recorded in a field log book. The original field forms will be maintained at the Facility. Copies of the completed forms will be maintained in a bound and sequentially numbered field file for reference during field activities. Indelible ink will be used to record all field activities. Photographic documentation of field activities will be performed, as appropriate. The daily record of field activities will include the following:

1. Site or unit designation;
2. Date;
3. Time of arrival and departure;
4. Field investigation team members including subcontractors and visitors;
5. Weather conditions;
6. Daily activities and times conducted;
7. Observations;

8. Record of samples collected with sample designations and locations specified;
9. Photographic log;
10. Field monitoring data, including health and safety monitoring;
11. Equipment used and calibration records, if appropriate;
12. List of additional data sheets and maps completed;
13. An inventory of the waste generated and the method of storage or disposal; and
14. Signature of personnel completing the field record.

5.8 Chemical Analyses

All samples collected for laboratory analysis will be submitted to an accredited laboratory. The laboratory will use the most recent standard EPA and industry-accepted analytical methods for target analytes as the testing methods for each medium sampled. Chemical analyses will be performed in accordance with the most recent EPA standard analytical methodologies and extraction methods.

Groundwater and soil samples will be analyzed for the following analytes using the indicated analytical methods. This list of analytes is commonly referred to as the EPA Region V Skinner List. It is a list of Appendix VIII Hazardous Constituents applicable to refinery wastes that was initially developed by EPA's Office of Solid Waste in 1985. In 1993, EPA's Office of Solid Waste updated the original list as part of the development of new EPA guidance for "Petitions to Delist Hazardous Waste." Finally, in 1997 EPA Region V's Waste Management Branch melded the 1985 and 1993 lists to establish a broader list of refinery process waste constituents.

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.3/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Benzene	SW-846 method 8260
Carbon disulfide	SW-846 method 8260
Chlorobenzene	SW-846 method 8260

Analyte	Analytical Method
Chloroform	SW-846 method 8260
1,2-Dichloroethane	SW-846 method 8260
1,1-Dichloroethane	SW-846 method 8260
1,4-Dioxane	SW-846 method 8260
Ethylbenzene	SW-846 method 8260
Ethylene dibromide	SW-846 method 8260
Methyl ethyl ketone	SW-846 method 8260
Methyl tertiary butyl ether	SW-846 method 8260/8021
Styrene	SW-846 method 8260
Toluene	SW-846 method 8260
1,1,1-Trichloroethane	SW-846 method 8260
Trichloroethene	SW-846 method 8260
Tetrachloroethene	SW-846 method 8260
Xylenes (total)	SW-846 method 8260
Acenaphthene	SW-846 method 8270
Anthracene	SW-846 method 8270
Benzo(a)anthracene	SW-846 method 8270
Benzo(b)fluoranthene	SW-846 method 8270
Benzo(k)fluoranthene	SW-846 method 8270
Benzo(a)pyrene	SW-846 method 8270
Bis(2-ethylhexyl) phthalate	SW-846 method 8270
Chrysene	SW-846 method 8270
o-Cresol	SW-846 method 8270
m-Cresol	SW-846 method 8270
p-Cresol	SW-846 method 8270
Dibenz(a,h)anthracene	SW-846 method 8270
Di-n-butyl phthalate	SW-846 method 8270
1,2-Dichlorobenzene	SW-846 method 8270
1,3-Dichlorobenzene	SW-846 method 8270
1,4-Dichlorobenzene	SW-846 method 8270
Diethyl phthalate	SW-846 method 8270
2,4 Dimethylphenol	SW-846 method 8270
Dimethyl phthalate	SW-846 method 8270
2,4 Dinitrophenol	SW-846 method 8270
Fluorene	SW-846 method 8270
Indeno(1,2,3-cd)pyrene	SW-846 method 8270
Naphthalene	SW-846 method 8270
4-Nitrophenol	SW-846 method 8270
Phenanthrene	SW-846 method 8270
Phenol	SW-846 method 8270
Pyrene	SW-846 method 8270
Pyridine	SW-846 method 8270
Quinoline	SW-846 method 8270

In addition, groundwater samples will also be analyzed for the following general chemistry parameters.

Analyte	Analytical Method
Chloride	EPA method 300.0
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020
Sulfate	EPA method 300.0

As discussed in section 5.3.3, field measurements will be obtained for pH, specific conductance, dissolved oxygen concentrations, oxidation-reduction potential, and temperature.

5.9 Data Quality Objectives

The Data Quality Objectives (DQOs) were developed to ensure that newly collected data are of sufficient quality and quantity to address the projects goals, including Quality Assurance/Quality Control (QA/QC) issues. The project goals are established in the Order and are to determine and evaluate the presence, nature, and extent of releases of contaminants at specified SWMUs. The type of data required to meet the project goals includes chemical analyses of soil and groundwater to determine if there has been a release of contaminants at the individual SWMUs.

The quantity of data is SWMU specific and is based on the historical operations at individual locations. The quality of data that is required is consistent across locations and is specified in Section VIII.D.7.c of the Order. In general, method detection limits should be 20% or less of the applicable background levels, cleanup standards and screening levels.

Additional DQOs include precision, accuracy, representativeness, completeness, and comparability. Precision is a measurement of the reproducibility of measurements under a given set of circumstances and is commonly stated in terms of standard deviation or coefficient of variation (EPA, 1987). Precision is also specific to sampling activities and analytical performance. Sampling precision will be evaluated through the analyses of duplicate field samples and laboratory replicates will be utilized to assess laboratory precision.

Accuracy is a measurement in the bias of a measurement system and may include many sources of potential error, including the sampling process, field contamination, preservation, handling, sample matrix, sample preparation, and analysis techniques (EPA, 1987). An evaluation of the accuracy will be performed by reviewing the results of field/trip blanks, matrix spikes, and laboratory QC samples.

Representativeness is an expression of the degree to which the data accurately and precisely represent the true environmental conditions. Sample locations and the number of samples have been selected to

ensure the data is representative of actual environmental conditions. Based on SWMU specific conditions, this may include either biased (i.e., judgmental) locations/depths or unbiased (systematic grid samples) locations, as discussed in Section 5.2 for soils and 5.3.2 for groundwater. In addition, sample collection techniques (e.g., purging of monitoring wells to collect formation water) will be utilized to help ensure representative results. An evaluation of on-going groundwater monitoring results will be performed to assess representativeness.

Completeness is defined as the percentage of measurements taken that are actually valid measurements, considering field QA and laboratory QC problems. EPA Contract Laboratory Program (CLP) data has been found to be 80-85% complete on a nationwide basis and this has been extrapolated to indicate that Level III, IV, and V analytical techniques will generate data that are approximately 80% complete (EPA, 1986). As an overall project goal, the completeness goal is 85%; however, some samples may be critical base on location or field screening results and thus a sample – by-sample evaluation will be performed to determine if the completeness goals have been obtained.

Comparability is a qualitative parameter, which expresses the confidence with which one data set can be compared to another. Industry standard sample collection techniques and routine EPA analytical methods will be utilized to help ensure data are comparable to historical and future data. Analytical results will be reported in appropriate units for comparison to historical data and cleanup levels.

6

Monitoring and Sampling Program

6.1 Groundwater Monitoring

After the initial investigation activities are completed, a second round of groundwater samples will be collected to confirm the initial groundwater analyses for samples collected at new monitoring wells. The groundwater samples will be collected no sooner than 30 days after the initial sampling event and no later than 75 days after the initial sampling event. If possible, the second sampling event will be timed to coincide with the regularly scheduled semiannual groundwater sampling events. The samples will be analyzed for the same constituents (i.e., EPA Region V Modified Skinner List and specified general chemistry parameters) for which the first samples were analyzed.

Any subsequent sampling events will be based on the results of the first two analyses and will be approved by the NMED prior to implementation.

7

Schedule

This investigation work plan will be implemented within 90 days of NMED approval. The estimated timeframes for each of the planned activities is as shown below:

- field work (inclusive of all soil and initial groundwater sampling) -- five weeks;
- laboratory analyses for initial sampling event – four weeks;
- data reduction and validation (soils and initial groundwater event) – three weeks;
- second groundwater sampling event – one week;
- laboratory analyses for second groundwater sampling event – three weeks;
- data reduction and validation (second groundwater event) – two weeks; and
- data gap analysis – three weeks.

Completion of the data gap analysis will complete all activities conducted under this investigation workplan. If the data gap analysis indicates that additional investigation activities are necessary to satisfy the site investigation objectives, then a revised investigation work plan will be submitted to the NMED for review and approval within 60 days of completing the data gap analysis. Otherwise, Giant will proceed to prepare an investigation report pursuant to Section X.C of the Order. The investigation report will be submitted to the NMED within 120 days of completion of the data gap analysis.

Tables

Table 1
Volatile Organic Ground Water Analytical Results Summary
Group 2 Investigation Work Plan
Bloomfield Refinery - Bloomfield, New Mexico

		Parameters				
		Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
WQCC 20NMAC 6.2.3103 (mg/L):		0.005 ⁽²⁾	0.75 ⁽¹⁾	0.7 ⁽²⁾	0.62 ⁽¹⁾	0.011 ⁽³⁾
Well ID:	Date Sampled:					
MW #1	4/1/2007	<0.001	<0.001	<0.001	<0.002	<0.0025
	8/15/2006	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/5/2006	<0.001	<0.001	<0.001	<0.003	<0.0025
	8/5/2005	0.0011	<0.001	<0.001	<0.001	<0.001
	4/11/2005	0.0013	<0.0005	<0.0005	0.0011	<0.0025
	8/23/2004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0025
	3/3/2004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0025
	8/21/2003	<0.001	<0.001	<0.001	<0.001	<0.001
	3/3/2003	<0.0005	0.00063	0.00065	0.0043	<0.0025
MW #3	4/5/2006	<0.001	<0.001	<0.001	<0.003	<0.0025
	8/5/2005	<0.001	<0.001	<0.001	<0.001	<0.001
	4/11/2005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0025
	8/21/2003	<0.001	<0.001	<0.001	<0.001	<0.001
MW #8	4/1/2007	<0.001	<0.001	<0.001	<0.002	<0.0025
	8/15/2006	<0.001	<0.001	<0.001	<0.003	<0.0015
	4/5/2006	<0.001	<0.001	<0.001	<0.003	<0.0025
	8/5/2005	<0.001	<0.001	<0.001	<0.001	<0.001
	4/11/2005	0.00053	<0.0005	<0.0005	0.0008	<0.0025
	8/23/2004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0025
	8/21/2003	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:

mg/L = milligram per liter

MW = monitoring well

RW = recovery well

NA = not analyzed

NE = not established

MTBE = methyl tertiary butyl ether

1 - WQCC 20NMAC 6.2.33103 = New Mexico Standard for Groundwater of 10,000 ug/L TDS or less.

2 - EPA Maximum Contaminant Level

3 - EPA Region VI Human Health Medium-Specific Screening Level 2007

Table 2
Total Metals Ground Water Analytical Results Summary
Group 2 Investigation Work Plan
Bloomfield Refinery - Bloomfield, New Mexico

		Parameters							
		Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)
40 CFR 141.62 MCL (mg/L):		0.01 (1)	2.0	0.005	0.10	0.015	0.05	0.1 (2)	0.002
Well ID:	Date Sampled:								
MW #1	8/15/2006	<0.020	0.023	<0.0020	<0.0060	<0.0050	<0.050	<0.0050	<0.0002
	8/5/2005	NA	NA	NA	<0.006	<0.005	NA	NA	NA
	8/23/2004	<0.02	0.052	<0.002	<0.006	<0.005	<0.05	<0.005	<0.0002
MW #3	8/5/2005	NA	NA	NA	0.016	<0.005	NA	NA	NA
	8/21/2003	NA	NA	NA	0.029	0.022	NA	NA	<0.0002
MW #8	8/15/2006	<0.020	0.018	<0.002	<0.006	<0.005	<0.05	<0.005	<0.0002
	8/5/2005	NA	NA	NA	0.33	<0.005	NA	NA	NA
	8/23/2004	<0.02	0.071	<0.002	1.9	<0.005	<0.05	<0.005	<0.0002
	8/21/2003	NA	NA	NA	0.72	<0.005	NA	NA	<0.0002

Notes:

mg/L = milligram per liter

MW = monitoring well

RW = recovery well

NA = not analyzed

NE = not established

40 CFR 141.62 MCL = National Primary Drinking Water Regulations: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels

(1) MCL as of 1/23/2006

(2) National secondary drinking water regulation

Table 3
 Dissolved Metals Ground Water Analytical Results Summary
 Group 2 Investigation Work Plan
 Bloomfield Refinery- Bloomfield, New Mexico

WQCC 20NMAC 6.2.3103 (mg/L):		Parameters															
Well ID:	Date Sampled:	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
MW #1	8/15/2006	<0.02	0.023	<0.002	74	<0.006	<0.006	<0.02	<0.005	18	0.09	2.4	<0.05	<0.005	120	<0.1	0.047
	8/5/2005	<0.02	0.022	<0.002	68	<0.006	<0.006	0.14	<0.005	18	0.14	2.7	<0.05	<0.005	140	<0.1	<0.005
	8/23/2004	<0.02	0.025	<0.002	67	<0.006	<0.006	0.27	<0.005	18	0.13	2.1	<0.05	<0.005	110	<0.1	0.021
MW #3	8/15/2006	<0.02	0.46	<0.002	61	<0.006	<0.006	<0.005	<0.005	16	0.08	2.6	0.043	<0.005	150	<0.1	0.12
	8/5/2005	<0.02	0.018	<0.002	480	<0.006	<0.006	0.047	<0.005	130	0.43	7.6	<0.05	<0.005	1300	<0.1	0.018
MW #8	8/21/2003	<0.02	0.3	<0.002	490	<0.006	<0.006	0.27	<0.005	140	0.58	10	0.024	<0.005	1100	<0.1	0.094
	8/15/2006	<0.02	0.018	<0.002	230	<0.006	<0.006	0.033	<0.005	35	0.42	3.2	<0.05	<0.005	380	<0.1	0.044
	8/5/2005	<0.02	0.021	<0.002	230	<0.006	<0.006	0.078	<0.005	37	0.65	3.1	<0.05	<0.005	360	<0.1	0.014
	8/23/2004	<0.02	0.021	<0.002	210	<0.006	<0.006	0.059	<0.005	35	0.57	3	<0.05	<0.005	360	<0.1	0.022
	8/21/2003	<0.02	0.36	<0.002	200	<0.006	<0.006	0.044	<0.005	38	0.68	4	0.09	<0.005	350	<0.1	0.13

Notes:

mg/L = milligram per liter

MW = monitoring well

RW = recovery well

NE = not established

NA = Not Analyzed

WQCC 20NMAC 6.2.33103 = New Mexico Standard for Groundwater of 10,000 ug/L or less

Table 4
General Chemistry Ground Water Analytical Results Summary
Group 2 Investigation Work Plan
Bloomfield Refinery - Bloomfield, New Mexico

Well ID:	Date Sampled:	Parameters										
		Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrite (mg/L)	Nitrogen (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	TDS (mg/L)	E.C. (umhos/cm)	CO ₂ (mg/L)	Alk (mg/L)
WQCC 20NMAC 6.2.3103	(mg/L):	1.6	250	NE	NE	10	NE	600	1000	NE	NE	NE
MW #1	8/15/2006	0.65	17	<0.50	1.2	NA	<0.50	190	640	940	240	270
	8/5/2005	0.68	31	<0.50	<0.10	2.1	<0.50	190	650	980	300	300
	8/23/2004	0.63	29	0.14	<0.10	1.9	<0.50	220	650	870	220	240
	8/15/2006	0.58	33	0.32	<0.10	1.6	<0.50	200	610	820	240	262
MW #8	8/15/2006	0.67	300	1.5	26	NA	<0.50	980	2200	3200	200	210
	8/5/2005	0.79	260	<2.5	<0.50	27	<0.50	740	2000	2900	260	260
	8/23/2004	0.64	250	1.2	NA	NA	<0.50	920	2100	2600	210	230
	8/21/2003	0.66	260	5	<0.10	14	<0.50	950	2100	2900	220	208

Notes:

- Alk = alkalinity, total
- CO₂ = Carbon Dioxide
- E.C. = electrical conductivity
- TDS = total dissolved solids
- umhos/cm = micro-mhos per centimeter
- mg/L = milligram per liter
- NE = not established
- NA = not analyzed
- MW = monitoring well
- RW = recovery well

WQCC 20NMAC 6.2.3103 = New Mexico Standard for Groundwater of 10,000 ug/L or less

Table 5
Volatile Organic Soil Analytical Results Summary
Group 2 Investigation Work Plan
Bloomfield Refinery - Bloomfield, New Mexico

Sample No.	Sample Location	Soil Screening Levels (mg/kg):	Parameters							
			Benzene (mg/kg)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	Phenolics	Chromium III	Lead	
			0.02 ⁽³⁾	21.7 ⁽³⁾	20.2 ⁽³⁾	2.06 ⁽³⁾	47.4 ⁽³⁾	100,000 ⁽¹⁻²⁾	800 ⁽¹⁻²⁾	
		Date Sampled								
51469-01	L1 & L2, 0-6" Quad. #1 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	11	10	
51469-02	L3 & L4, 6-12" Quad. #1 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	8.9	9.8	
51469-03	L5 & L6, 0-6" Quad. #2 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	9.9	9	
51469-04	L7 & L8, 6-12" Quad. #2 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	7.6	6.7	
51469-05	L9 & L10, 0-6" Quad #3 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	7.8	7.6	
51469-06	L11 & L12, 6-12" Quad. #3 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	7.4	7	
51469-07	L13 & L14, 0-6" Quad. #4 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	9.1	8.2	
51469-08	L15 & L16, 6-12" Quad #4 - Landfill	10/16/1985	<0.5	<1.0	<1.0	<2.0	<0.1	7	7.7	

Table 6
Field Measurement Summary
Group 2 Investigation Work Plan
Western Refinery Company - Bloomfield, New Mexico

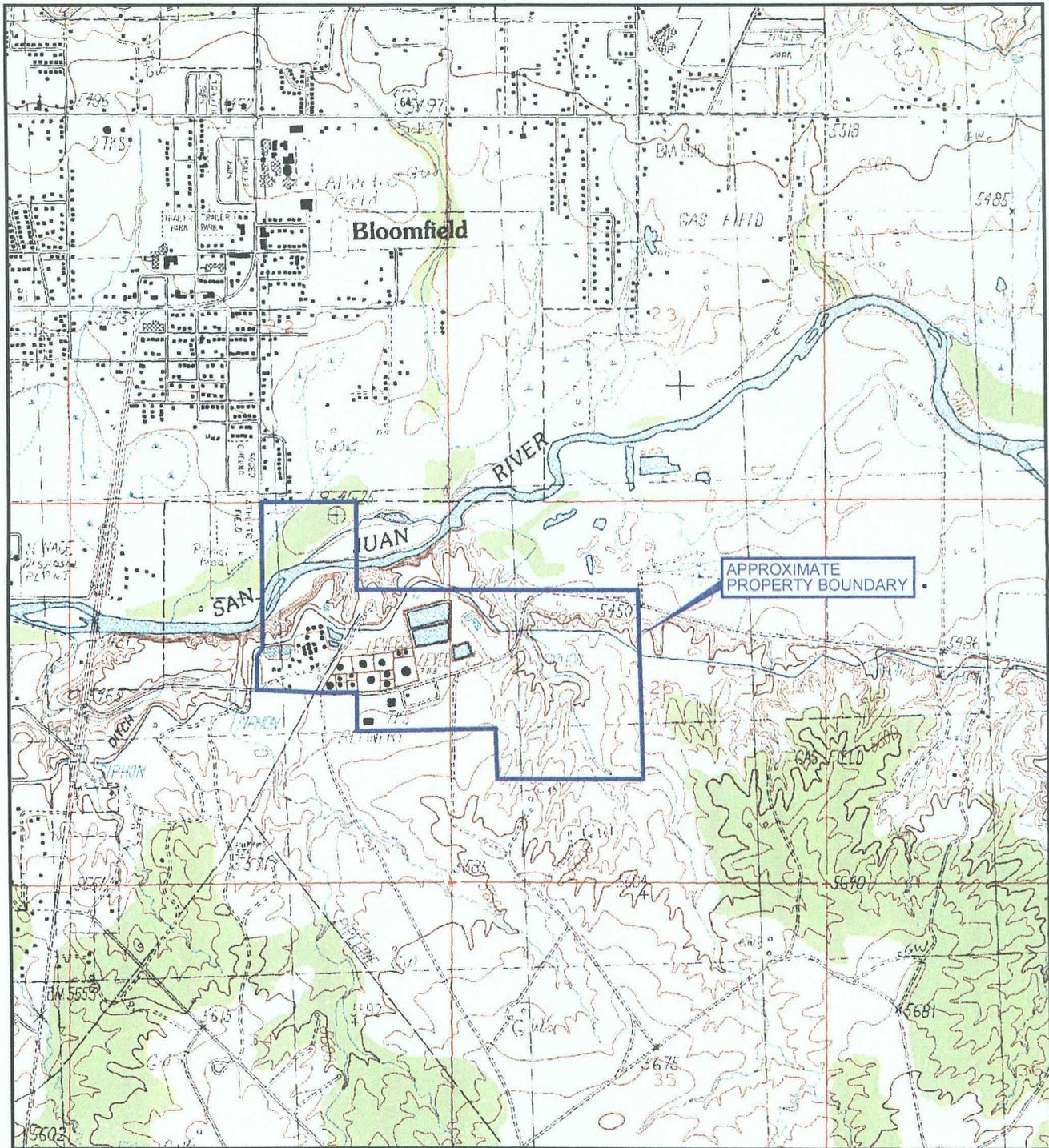
Well ID:	Date Sampled:	Field Measurements				
		E.C. (umhos/cm)	pH (s.u.)	Temperature (deg F)	DO (mg/L)	ORP (--)
#1 East O/F	3/4/2004	NM	NM	NM	NM	NM
	3/4/2003	1049	6.71	51	NM	NM
#2 East O/F	3/4/2004	1199	7.23	47	NM	NM
	3/4/2003	973	7.03	45	NM	NM
#3 East O/F	3/4/2004	1224	7.36	49	NM	NM
	3/4/2003	1083	7.04	50	NM	NM
MW #1	8/15/2006	952	7.03	64	0.9	223
	4/6/2006	815	6.84	56	NR	NR
	8/1/2005	986	7.02	63	9.2	106
	4/1/2005	1115	6.90	54	NR	NR
	8/23/2004	927	6.90	63	5.4	-532
	3/2/2004	887	7.51	53	NM	NM
	8/21/2003	1001	7.41	63	6.5	105
MW #3	3/3/2003	1285	8.01	54	NM	NM
	8/15/2006	NS	NS	NS	NS	NS
	4/6/2006	7212	7.02	65	NR	NR
	8/1/2005	7685	6.98	67	NS	-44
	4/6/2005	2535	7.02	61	NS	NS
	8/23/2004	7558	6.96	64	NS	-11
MW #5	8/25/2003	7818	6.96	66	NM	57
	8/15/2006	NS	NS	NS	NS	NS
	4/6/2006	NS	NS	NS	NS	NS
	8/1/2005	NS	NS	NS	NS	NS
	4/4/2005	NS	NS	NS	NS	NS
	8/23/2004	NS	NS	NS	NS	NS
MW #8	8/25/2003	NS	NS	NS	NS	NS
	8/15/2006	2966	7.04	61	0.5	231
	4/6/2006	2791	6.97	58	NR	NR
	8/1/2005	2730	6.91	59	7.3	114
	4/12/2005	2481	7.04	59	NR	NR
	8/19/2004	2600	7.02	62	2.9	142
	8/25/2003	2654	6.98	60	7.1	176

Notes:

deg F = degrees Fahrenheit
E.C. = electrical conductivity
mg/L = milligrams per liter
MW = monitoring well
NM = not measured
NR = not required

ORP = Oxidation-reduction potential
SPH = separate phase hydrocarbon contained in well, not sampled
s.u. = standard units (recorded by portable pH meter)
umhos/cm = micro-mhos per centimeter
NS = not sampled, well is dry
NPP = no product present

Figures



Map Source: USGS 7.5 Min. Quad Sheet BLOOMFIELD, NM., 1985.

GIANT

INDUSTRIES, INC.

PROJ. NO.: Giant DATE: 11/3/07 FILE: GiantA04

**FIGURE 1
SITE LOCATION MAP
GIANT BLOOMFIELD REFINERY**



0 2000
SCALE IN FEET

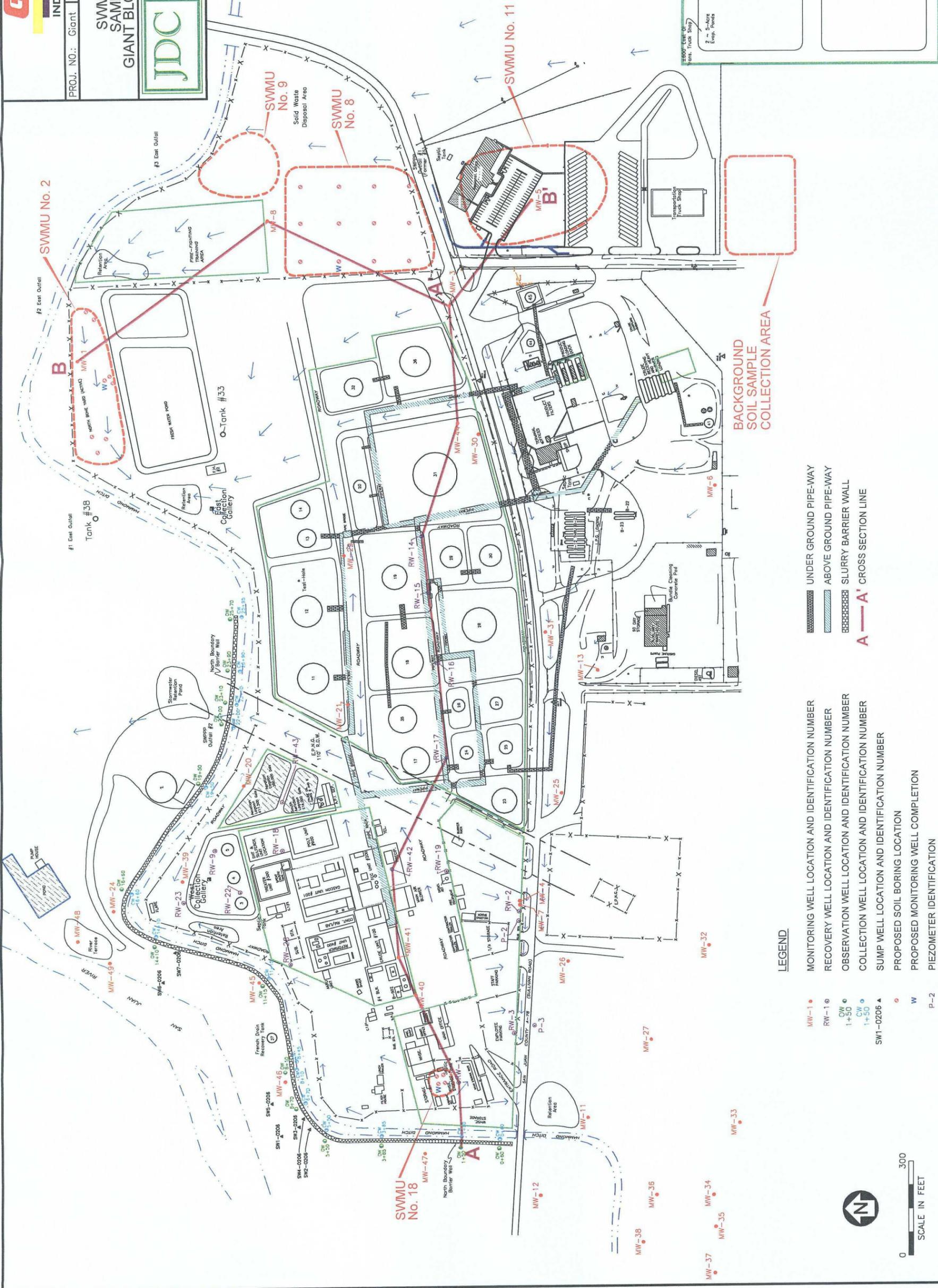


QUADRANGLE LOCATION



JD Consulting, L.P.

404 Camp Craft Road
Austin, Texas 78746



- LEGEND**
- MW-1 • MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
 - RW-1 ○ RECOVERY WELL LOCATION AND IDENTIFICATION NUMBER
 - CW 1-4 ○ OBSERVATION WELL LOCATION AND IDENTIFICATION NUMBER
 - CW 1-4 ○ COLLECTION WELL LOCATION AND IDENTIFICATION NUMBER
 - SW1-0206 ▲ SUMP WELL LOCATION AND IDENTIFICATION NUMBER
 - PROPOSED SOIL BORING LOCATION
 - W PROPOSED MONITORING WELL COMPLETION
 - P-2 PIEZOMETER IDENTIFICATION
 - ▬ UNDER GROUND PIPE-WAY
 - ▬ ABOVE GROUND PIPE-WAY
 - ▬ SLURRY BARRIER WALL
 - A—A' CROSS SECTION LINE



0 300
SCALE IN FEET

1500' East of
Rent. Truck Shop
2 ~ 5-Acre
Equip. Ponds

BACKGROUND
SOIL SAMPLE
COLLECTION AREA

SWMU No. 2

SWMU No. 9
Solid Waste
Disposal Area

SWMU No. 8

SWMU No. 11

SWMU No. 18

MW-32

MW-33

MW-38

MW-35

MW-34

MW-35

MW-27

MW-12

MW-37

MW-34

MW-35

MW-26

MW-25

MW-27

MW-26

MW-25

MW-27

MW-13

MW-14

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MW-92

MW-93

MW-94

MW-95

MW-96

MW-97

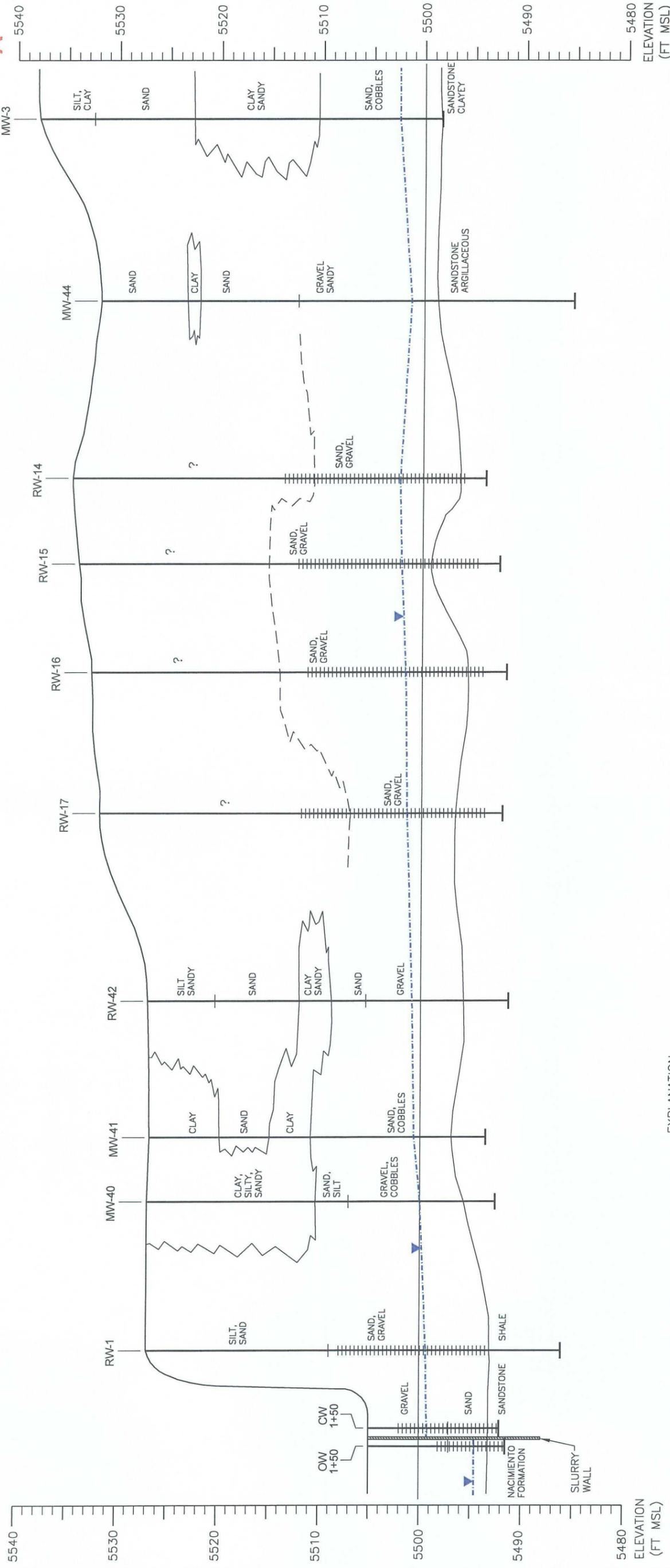
MW-98

MW-99

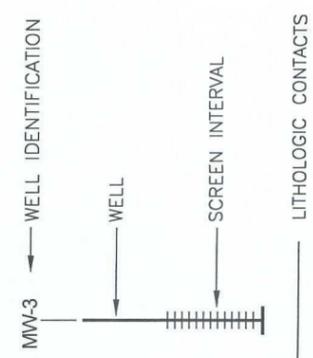
MW-100

**WEST
A**

**EAST
A'**



EXPLANATION



GIANT
INDUSTRIES, INC.

PROJ. NO.: Giant | DATE: 10/30/07 | FILE: GiantB05

FIGURE 3
CROSS SECTION A-A'
WEST TO EAST
GIANT BLOOMFIELD REFINERY

JDC
JD Consulting, L.P.
404 Camp Craft Road
Austin, Texas 78746

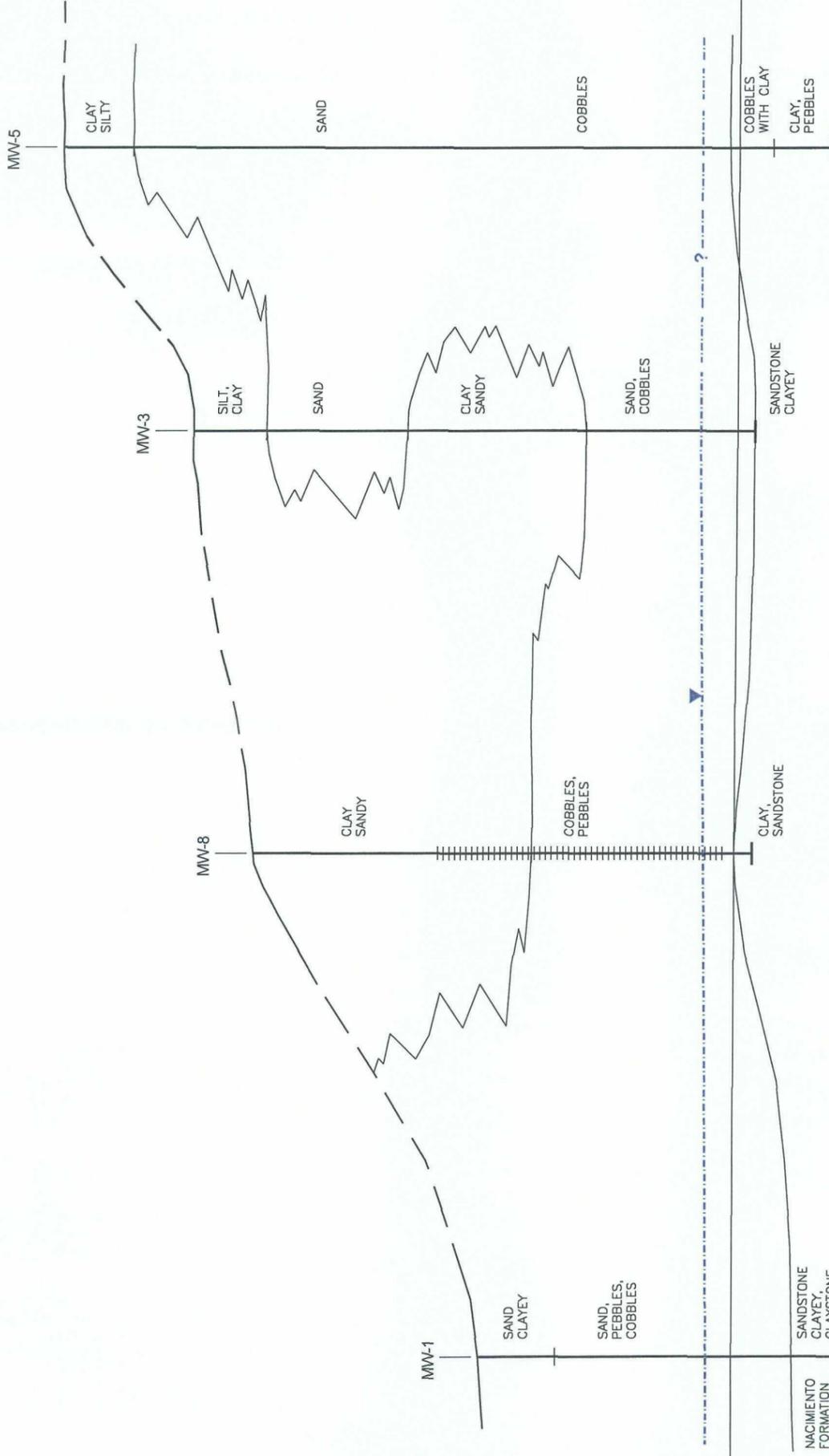
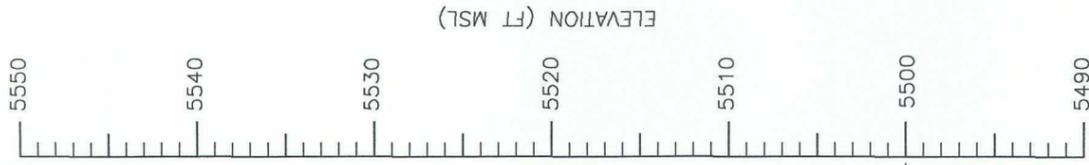
SCALE IN FEET
VERTICAL EXAGGERATION = 20X

--- POTENTIOMETRIC SURFACE MEASURED APRIL 2007

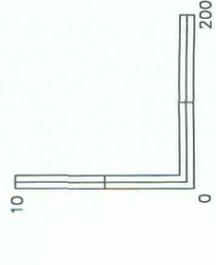
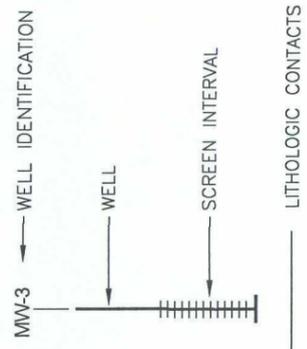
**NORTH
B**



**SOUTH
B'**



EXPLANATION



GIANT
INDUSTRIES, INC.

PROJ. NO.: Giant | DATE: 10/31/07 | FILE: GiantB06

FIGURE 4
CROSS SECTION B-B'
NORTH TO SOUTH
GIANT BLOOMFIELD REFINERY

JDC
JD Consulting, L.P.
404 Camp Craft Road
Austin, Texas 78746

— POTENTIOMETRIC SURFACE MEASURED APRIL 2007



0 1200
SCALE IN FEET

Legend

- Monitoring Well
- Observation Well
- Recovery Well
- Piezometer
- Collection Well
- Sump Well
- Site

MW-35
NPP
Well ID

ft = Feet

NPP = No Product Present
NA = Not Available

Note:

OW's and CW's were collected on 1/15/07
SW's were collected on 1/2/07

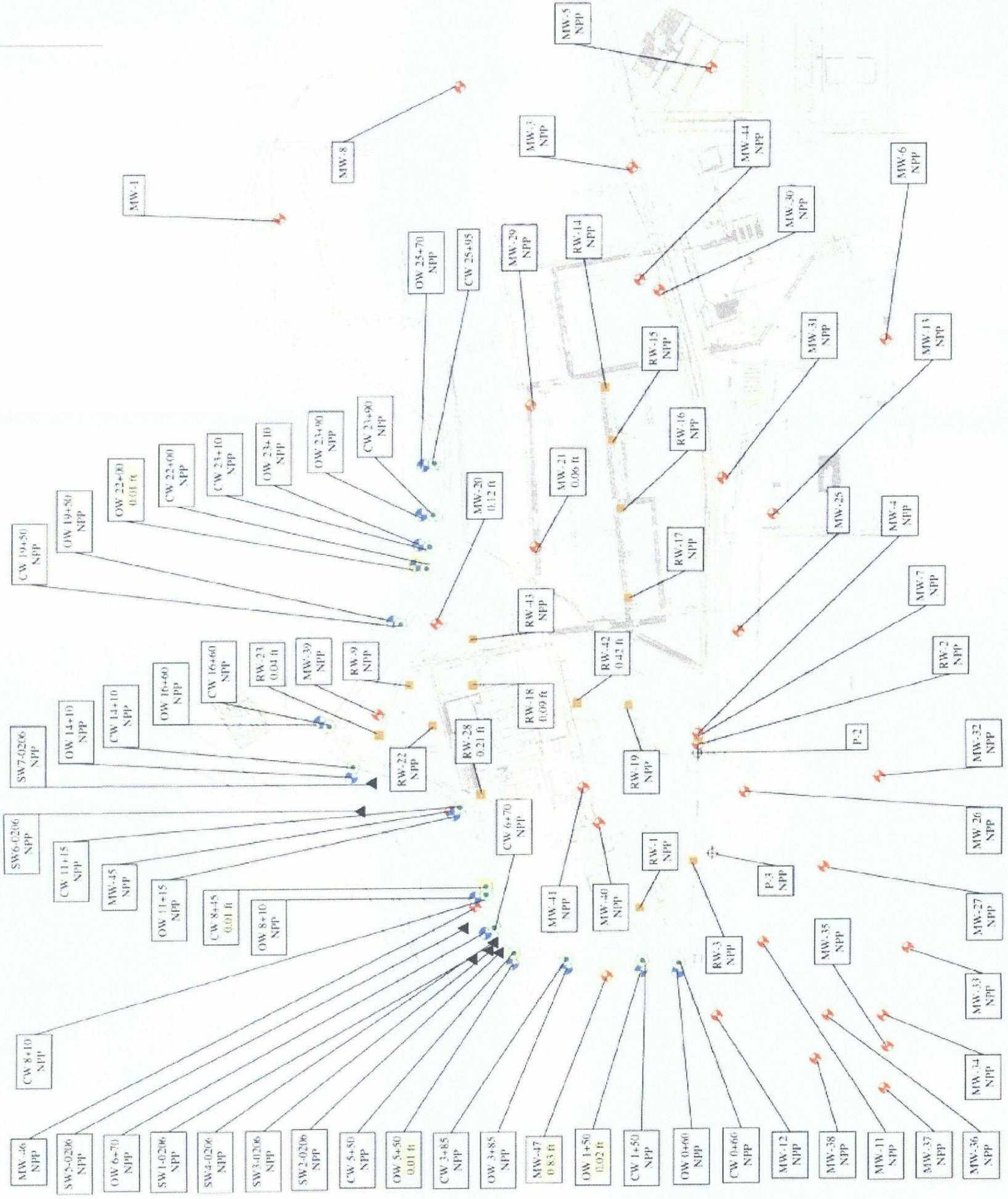


PROJ. NO.: Giant DATE: 11/7/07 FILE: GiantB08

FIGURE 6
SPRING 2007
SEPARATE PHASE
HYDROCARBON THICKNESS MAP
GIANT BLOOMFIELD REFINERY



404 Camp Craft Road
Austin, Texas 78746



Map Source: Malcolm-Pirnie Facility-Wide Groundwater Monitoring Plan, Western Refining Bloomfield Refinery, Figure 8 Separate Phase Hydrocarbon Map.mxd, July 2007.



Legend

- Monitoring Well
- Observation Well
- Outfall
- Recovery Well
- Site

MW-35	- Benzene
< 1.0	- Toluene
< 1.0	- Ethylbenzene
< 1.0	- Xylenes, Total
3.3	- MTBE
< 2.5	

All concentrations in micrograms per liter (ug/L)

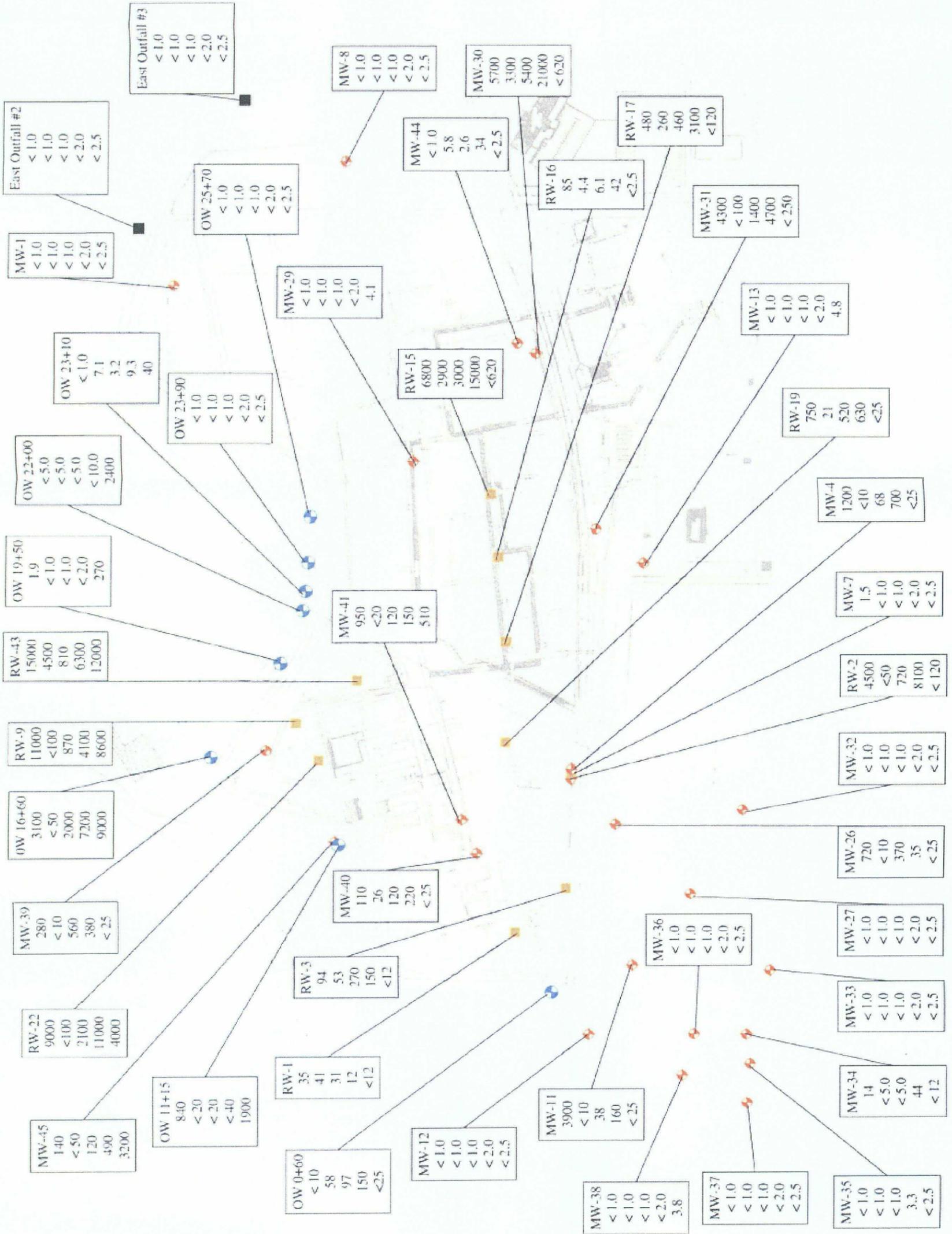


PROJ. NO.: Giant DATE: 11/7/07 FILE: GiantB09

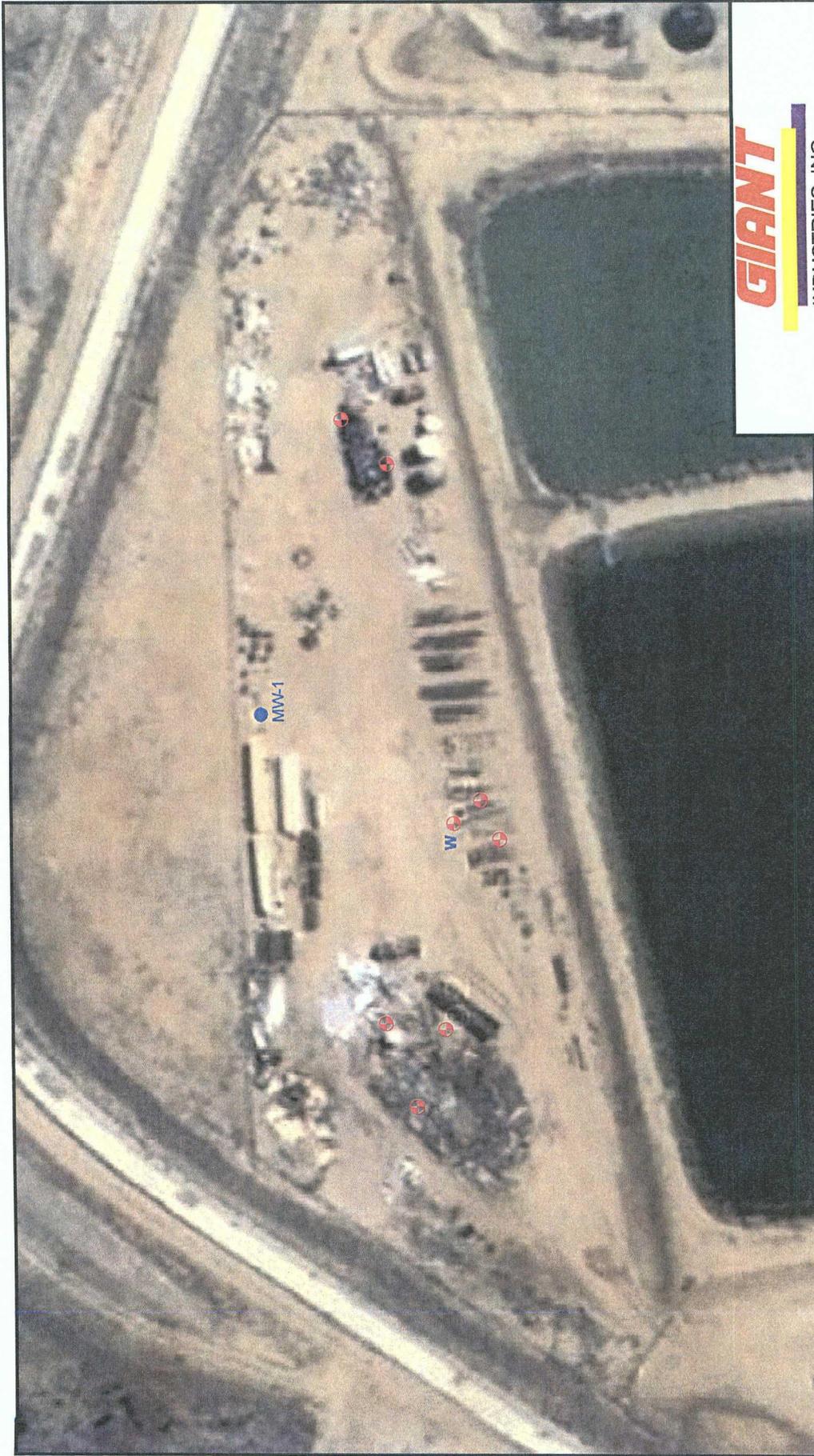
FIGURE 7
 SPRING 2007
 DISSOLVED-PHASE
 GROUNDWATER DATA
 GIANT BLOOMFIELD REFINERY



404 Camp Craft Road
 Austin, Texas 78746



Map Source: Malcolm-Pirnie Facility-Wide Groundwater Monitoring Plan, Western Refining Bloomfield Refinery, Figure 4 Concentration Map.mxd, July 2007.



Aerial Map Source: Google Maps, 2007.



0 80
SCALE IN FEET

LEGEND

-  PROPOSED SOIL BORING LOCATION
-  PROPOSED MONITORING WELL COMPLETION
-  MONITORING WELL LOCATION



PROJ. NO.: Giant DATE: 10/25/07 FILE: GiantA01

FIGURE 8

SWMU No. 2

SAMPLE LOCATION MAP
GIANT BLOOMFIELD REFINERY



JD Consulting, L.P.

404 Camp Craft Road
Austin, Texas 78746



Aerial Map Source: Google Maps, 2007.

GIANT

INDUSTRIES, INC.

PROJ. NO.: Giant | DATE: 10/26/07 | FILE: GiantA02

FIGURE 9
SWMU No. 8
SAMPLE LOCATION MAP
GIANT BLOOMFIELD REFINERY



0 80
SCALE IN FEET

LEGEND

-  PROPOSED SOIL BORING LOCATION
-  PROPOSED MONITORING WELL COMPLETION
-  MW-8 MONITORING WELL LOCATION



JD Consulting, L.P.

404 Camp Craft Road
Austin, Texas 78746



Aerial Map Source: Google Maps, 2007.

GIANT

INDUSTRIES, INC.

PROJ. NO.: Giant | DATE: 10/26/07 | FILE: GiantA03

FIGURE 10
SWMU No. 18
SAMPLE LOCATION MAP
GIANT BLOOMFIELD REFINERY



0 80
SCALE IN FEET

LEGEND

-  PROPOSED SOIL BORING LOCATION
-  PROPOSED MONITORING WELL COMPLETION
-  RW-1 RECOVERY WELL LOCATION



JD Consulting, L.P.

404 Camp Craft Road
Austin, Texas 78746

References

- EPA, 1987, Data Quality Objectives for Remedial Response Activities; United States Environmental Protection Agency, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, OSWER Directive 9355.0-7B, 85p
- EPA, 1991, Human Health Evaluation Manual, Part B: "Development of Risk-Based Preliminary Remediation Goals; United States Environmental Protection Agency, Office of Solid Waste and Emergency Response; Memorandum December 13, 1991, OSWER Directive 9285.7-01B, 54p.
- EPA, 1996, Soil Screening Guidance: User's Guide; United States Environmental Protection Agency, Office of Solid Waste and Emergency Response; Publication 9355.4-23, p. 123.
- EPA, 2000, Guidance on Choosing a Sampling Design for Environmental Data Collection, EPA/240/R-02/005, EPA QA/G-5S, 168 p.
- EPA, 2006, Guidance on Systematic Planning Using the Data Quality Objectives Process, United States Environmental Protection Agency, Office of Environmental Information; EPA/240/B-06/001, p. 111.
- Groundwater Technology, 1994, RCRA Facility Investigation/Corrective Measures Study Report Bloomfield Refining Company #50 County Road 4990 Bloomfield, New Mexico, p.51.

Appendix A

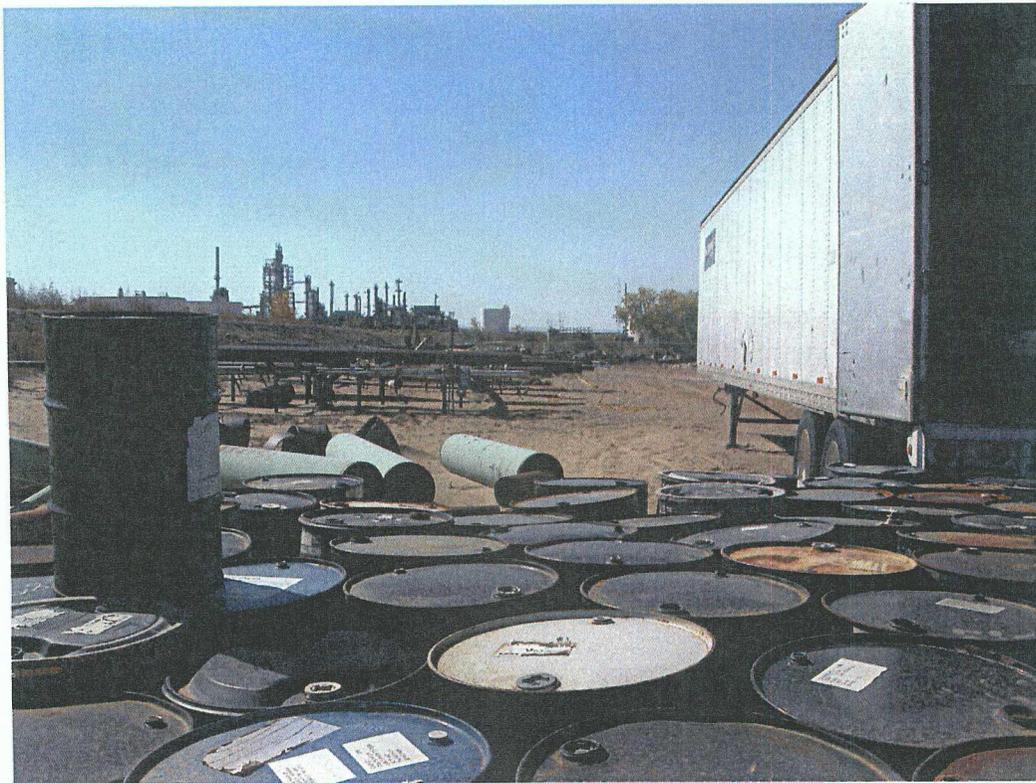
Photographs



North Bone Yard (SWMU No. 2)
Looking West at staging area for empty drums.



North Bone Yard
Looking northwest from center



North Bone Yard (SWMU No. 2)
Empty drums being loaded for transport.



North Bone Yard
MW-1



North Bone yard
Scrap metal storage area.



Landfill (SWMU No. 8)
Looking to southeast across landfill



Landfill
Looking south from Northwest corner.



Landfill
Looking southeast across landfill area.



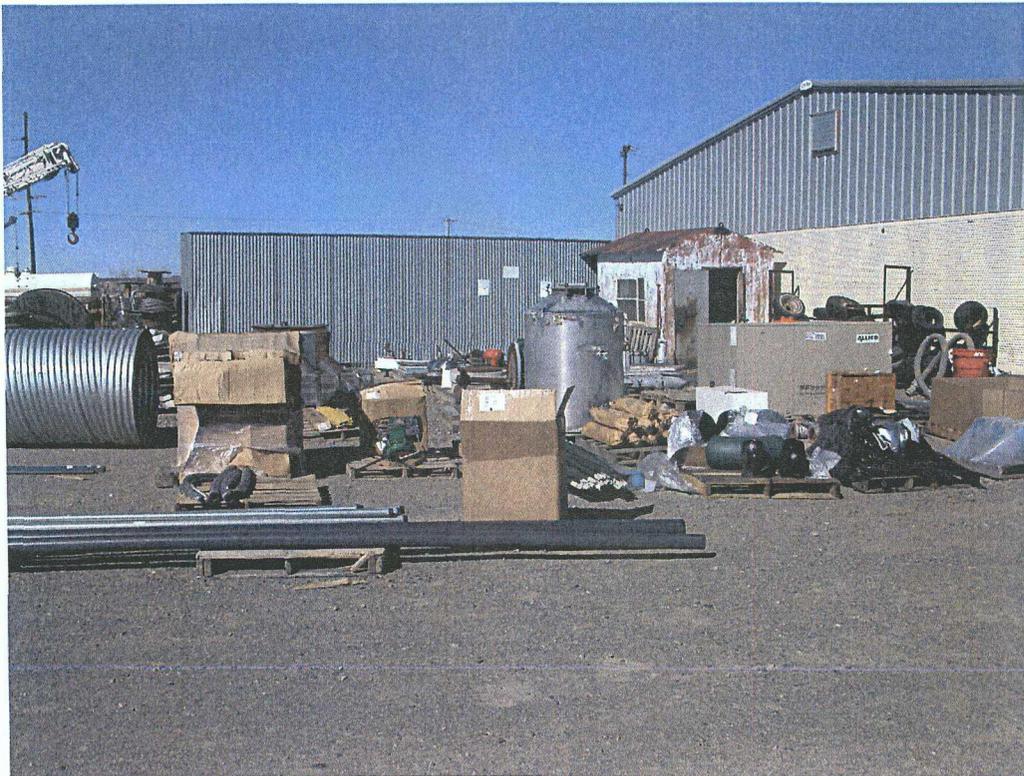
Landfill
Looking east across landfill, MW-8 off to left.



Landfill
Closeup of MW-8.



Spray Irrigation Area (SWMU No. 11)
Looking to southeast across former irrigation area.



Warehouse Yard (SWMU No. 18)
Looking to north across former drum storage area.



Warehouse Yard
Looking north across western portion of former drum storage area.

Appendix B

Landfill (SWMU No. 8) and Landfill Pond (SWMU No. 9) Historical Documentation

GARDERE & WYNNE
ATTORNEYS AND COUNSELORS
1500 DIAMOND SHAMROCK TOWER
DALLAS, TEXAS 75201

214-979-4500

TELECOPIER 214-979-4667
CABLE: GARWYN
TELEX 73-0197

WRITER'S DIRECT DIAL NUMBER

(214) 979-4569

June 4, 1986

James L. Turner, Esq.
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region VI
InterFirst Two Building
1201 Elm Street
Dallas, Texas 75270

Re: Bloomfield Refining Company
RCRA Docket No. VI-501-H;
Consent Agreement and Final Order

Dear Jim:

On May 20, 1986, I received your letter dated May 19, 1986 which requested certain information on sampling results submitted to you and the New Mexico Environmental Improvement Division (NMEID) on February 13, 1986. You also requested a status report on performance items in paragraphs 1 through 3 (including subparagraphs) of the above-referenced order. The purpose of this letter is to respond to both requests.

In connection with your questions about the sampling results, I am submitting the attached letter from Mr. James E. Rumbo of Engineering-Science, the Company's technical consultant. This letter responds to all five items listed in your information request.

I now turn to the requested status report, based on information provided to me by the Company. Our response focuses on those items which contemplate affirmative performance on the part of the Respondent.

Paragraph 1

The civil penalty of \$5,700 has been paid.

Paragraph 2C

The API separator was thoroughly cleaned in November 1985. The material removed was handled and manifested as a hazardous waste. It was transported to U.S. Pollution Control, Inc.'s Grassy Mountain facility near Clive, Utah. On May 23, 1986, the sludge level was 0.5 feet.

Paragraph 2D

The prescribed documentation is available at the facility.

Paragraph 2E

Spent caustic is removed from the existing spent caustic tank in less than 90 days, and the standards established under 40 C.F.R. 262.34, and its New Mexico equivalent are being observed. However, an entirely new spent caustic tank system has been installed to further comply with the repair and maintenance obligations of this paragraph. It includes a substantial concrete slab, containment dike, and new piping to insure that no discharge of caustic can occur. This system is scheduled to be operational by June 13, 1986. The existing system will then be closed in accordance with 40 C.F.R. § 265.197 and its New Mexico equivalent.

Paragraph 2F

All of the material removed from the SOWP and NOWP in October 1985 was properly handled as a hazardous waste. The required engineering certification of removal will be submitted in conjunction with the final closure plan.

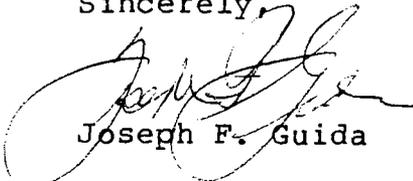
Paragraph 3

The activities specified in "A Sampling and Closure Proposal for the API Wastewater Ponds, Landfill, and Landfill Pond at the Bloomfield Refinery," attached to the above-referenced order as Exhibit B, have been completed. In accordance with the order, the Company submitted a closure plan and proof of financial responsibility on November 22, 1985. On February 13, 1986, the Company provided to EPA and NMEID copies of analytical results and analysis, as contemplated in Exhibit B and to supplement the November 22, 1985 closure plan. Following consultation with NMEID on the plan now before that agency, the Company expects to finalize the closure plan and move forward, as appropriate, on implementation.

James L. Turner, Esq.
June 4, 1986
Page 3

If you have any questions or would like additional information, please contact me at your convenience.

Sincerely,



Joseph F. Guida

JFG:ta
8711S

Enclosures

cc: Ms. Denise Fort
Mr. Jack Ellvinger

James L. Turner, Esq.
June 4, 1986
Page 5

bcc: Mr. Harry F. Mason
Mr. Chris Hawley

ES ENGINEERING-SCIENCE

2901 NORTH INTERREGIONAL • AUSTIN, TEXAS 78722 • 512/477-9901

CABLE ADDRESS: ENGINSCI
TELEX: 77-6442

June 2, 1986

Mr. James L. Turner
Assistant Regional Counsel
U.S. EPA, Region VI
Interfirst Two Building
1201 Elm Street
Dallas, TX 75270

Re: Bloomfield Refining Company, Inc.
Gary Refining Corp.
RCRA Docket No. VI-501-H; Consent Agreement and Final Order

Dear Mr. Turner:

Submitted herewith is a response to your letter dated 19 May 1986 to Joe Guida. The subject of your letter was the results obtained from a sampling effort performed by ES personnel at the Bloomfield Refinery pursuant to meeting mutually agreed on stipulations of the consent agreement. You noted concerns expressed by the NMEID director about the validity of sampling results and submitted a list of five requests for additional data which has been reproduced here for convenience:

- (1) A list of the detection limits set for samples 51469-01 through 29, "Inorganic Parameters for Phenolics."
- (2) A description of the protocol used to conduct sample analysis in all samples.
- (3) A comprehensive description of the QA/QC for obtaining all samples and conducting the laboratory analysis of them.
- (4) An explanation of how the detection limits were established for the "Skinner Base/Neutral Organics" and why these fluctuate from 400 to 4,000 ug/kg in some cases.
- (5) A facility map detail of the landfill, landfill pond, and north and south API pond areas, showing all sample locations.

The field sampling effort was designed, planned, and executed carefully to provide representative samples from the areas of interest. The laboratory employed on the project performed state-of-the-art analyses of the samples and reported results in report form. Any "absence of compounds that would normally be present at a refinery" is likely to represent a lack

Mr. James L. Turner
Page Two
June 2, 1986

of compounds in the material that was sampled rather than deficient sampling or laboratory technique.

A revised report submitted by the contract laboratory is included in this submittal and should adequately address the first two requests for information. Pages 7 and 8 of the report should satisfy request number 1. The analytical methodology section (pages 18-20) should satisfy request number 2.

QA/QC procedures for the sampling effort were followed for both the local sampling sites and sampling equipment. Transport of samples to the laboratory was made in a timely and secure manner. In the case of the API ponds, the sampling locations within each pond were first cleaned with a series of washes consisting of (in chronological order)alconox soap solution, deionized water, methanol, and deionized water. Clean sampling equipment was utilized to extract and store samples. After each sample collection in all sampling areas, equipment was washed thoroughly using the same series of washes mentioned above. Samples were placed in the appropriate containers and individually enclosed in Zip-loc bags and stored in ice in a cooler. The cooler was sent to the contract laboratory via Federal Express utilizing standard chain-of-custody procedures.

Quality control measures utilized by the laboratory have been enumerated in previously submitted information but have been reiterated here for completeness:

"A method blank was analyzed daily to determine any interferences in the system. Four samples were spiked with known amounts of the targeted compounds to determine the percent recovery. One of the samples was run in duplicate. All the results of the above were satisfactory.

In addition to the above controls, all standards, samples, and blanks were analyzed with an internal standard present to ensure consistency in the system."

With regard to request number 4, detection limits are obviously based on a laboratory's ability to detect concentrations of a substance of interest using a selected laboratory technique. Some compounds are harder to detect than others due to the compound's inherent characteristics (e.g., molecular weight, polarity) and the relative degree to which other compounds interfere with interpretation of results (in the case of GC/MS). For example, in the laboratory report submitted for BRC, the detection limit for benzidine is listed to be 4,000 ug/kg compared with anthracene having a detection limit of 400 ug/kg. In this example, benzidine is harder to detect than anthracene, and the detection limit for benzidine is therefore higher than the detection limit for anthracene. It should also be noted that the detection limits utilized for analysis are typical of the analytical methods specified and are comparable to the analytical detection

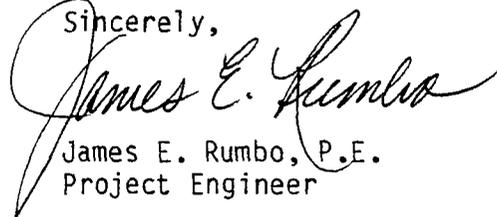
Mr. James L. Turner
Page Three
June 2, 1986

limits for the same and similar compounds in soils analyzed under EPA's Contract Laboratory Program.

Figures 1 through 4 depict a facility map with details of sampling areas as solicited in request number 5. The specific sampling sites within the landfill area were not defined, however, due to the lack of a specific area with which to reference the sample locations. During the sampling effort, the area of the landfill observed to be contaminated was irregularly shaped and inconsistent in areal extent with the land area depicted on earlier facility plans. For this reason, that portion of the landfill area appearing to have some contamination was selected for sampling and divided into quadrants. The midpoint of each quadrant (selected by eye) was then sampled. Distances between sampling sites were measured with a tape and ranged from 25 to 65 feet. An approximation of the sampling area within the landfill has been shown on Figure 1.

I trust that the above information is sufficient to answer any questions you may have. If you have any additional questions, please do not hesitate to call.

Sincerely,



James E. Rumbo, P.E.
Project Engineer

Enclosures

dg

FIGURE 1
BLOOMFIELD REFINERY FACILITY MAP

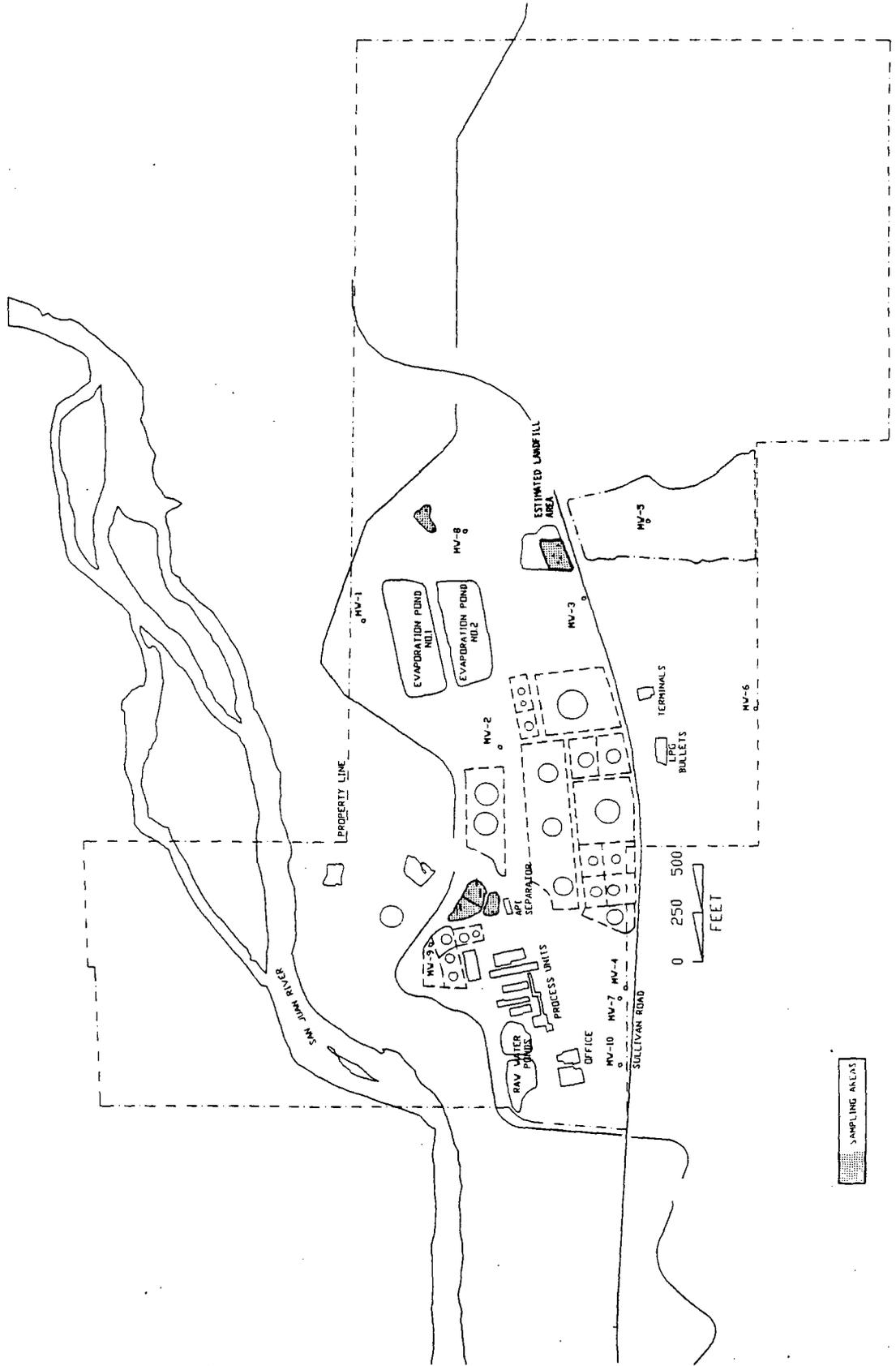


FIGURE 2
NORTH API POND

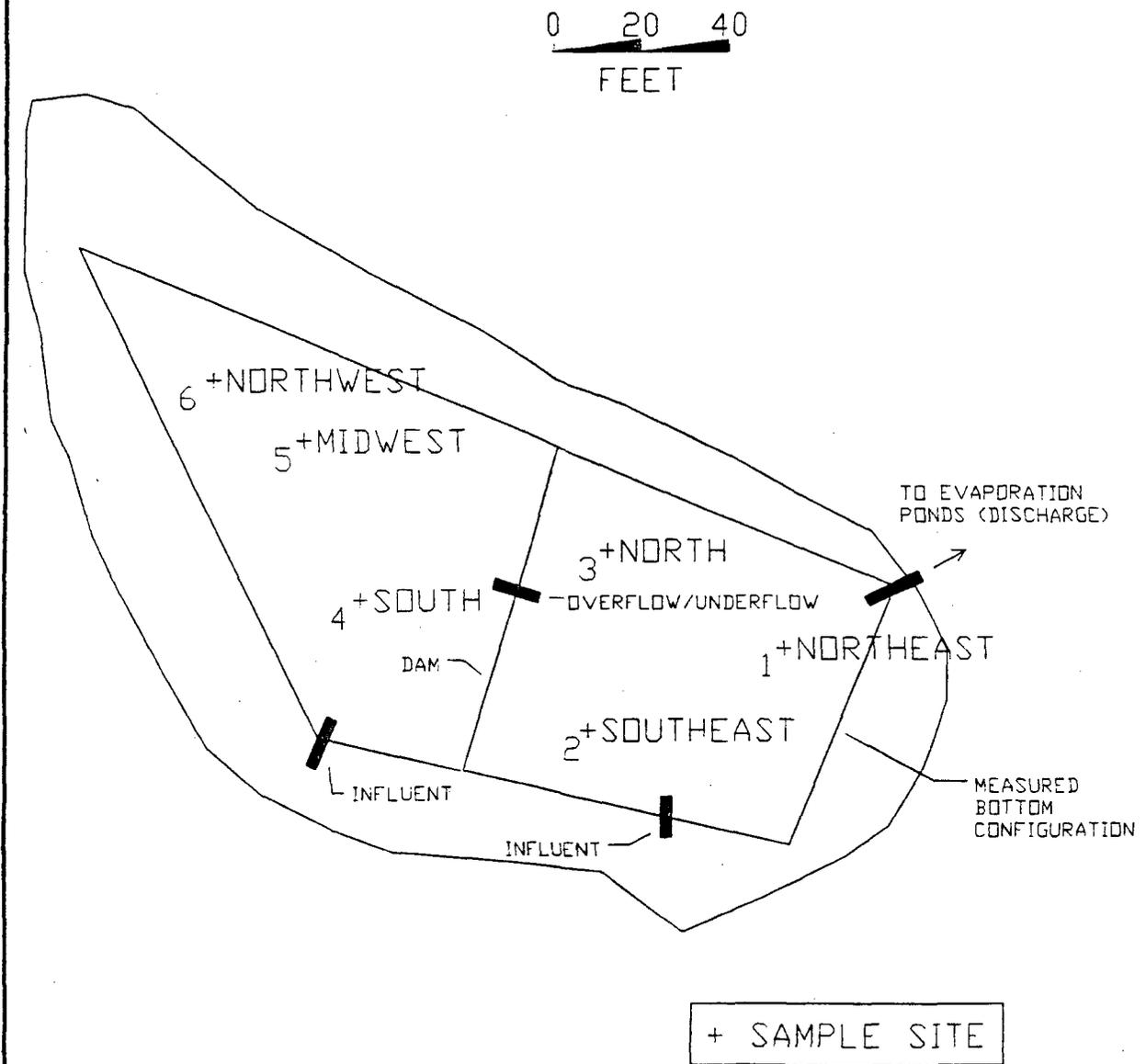
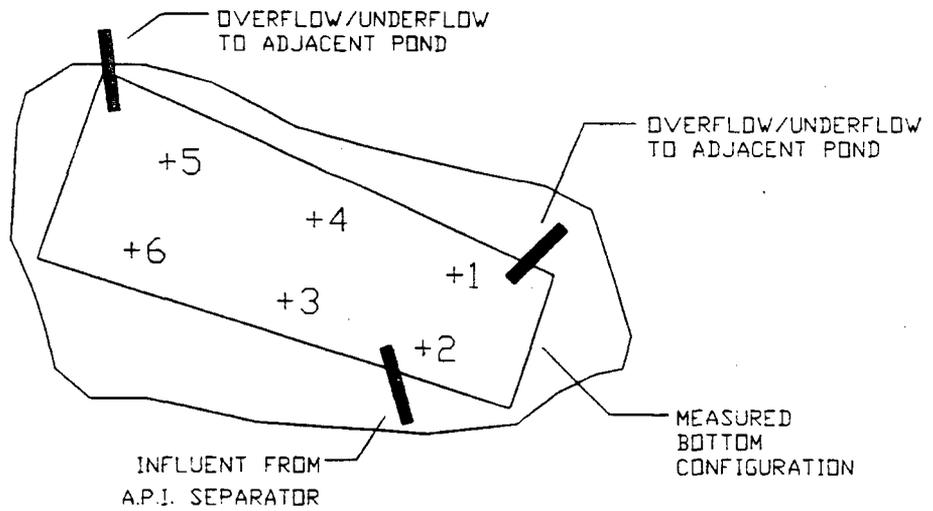
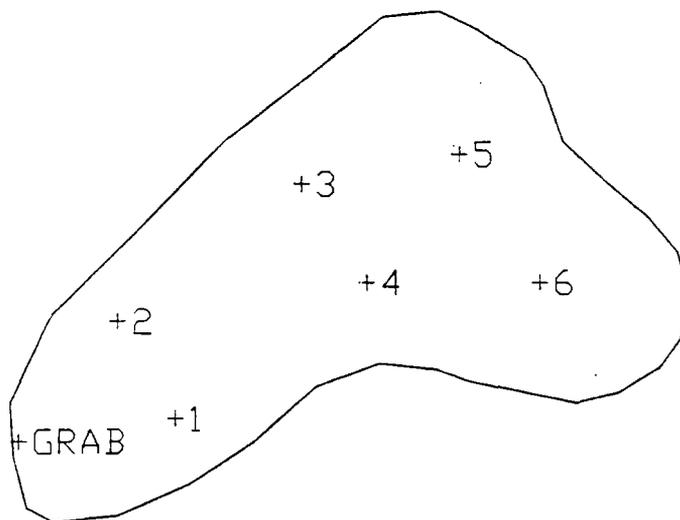


FIGURE 3 SOUTH API POND



+ SAMPLE SITE

FIGURE 4 LANDFILL POND



+ SAMPLE SITE

REPORT OF ANALYTICAL RESULTS
FOR
ENGINEERING SCIENCE
BLOOMFIELD REFINING COMPANY

Prepared By:

Rocky Mountain Analytical Laboratory
5530 Marshall Street
Arvada, CO 80004

May 28, 1986

I. INTRODUCTION

On October 19, 1985 Rocky Mountain Analytical Laboratory received 29 soil samples from Bloomfield Refining Company, collected by Engineering Science. The analyses performed on these samples have been categorized as follows:

- o Analyses for Appendix VIII organic constituents, and
- o Analyses for selected constituents and phenolics.

Appendix VIII Constituents

The analytical parameters selected were based on recent communication with EPA concerning RCRA monitoring requirements for petroleum companies. The parameters selected were based on a subset of Appendix VIII hazardous constituents commonly referred to as the "Skinner" list. Communications from EPA in late 1984 contained various versions of this list. During this time RMAL, under contract to the American Petroleum Institute, performed several studies evaluating analytical methods proposed for measuring the constituents in these various lists. Due in part to efforts by RMAL and others, the EPA in early 1985 revised this list. The documents which were used by RMAL in defining the analytical parameters are listed in a bibliography at the end of this report. This list, as revised, contains 46 organic compounds and is presented in Table 1. The organic compounds are further subdivided into volatile and semivolatile (extractable) compounds.

Additional Tests

In addition to the tests for the full "Skinner" list, some samples were analyzed only for a specific subset of this list. The subset was benzene, toluene, xylene, lead, chromium and total phenolics.

All samples were shipped by air freight to RMAL's Denver, Colorado laboratory. Each sample was assigned a unique RMAL sample number as shown in the enclosed Sample Description Information sheet. These sample numbers were used throughout the project to track and control the analytical work and are used in this document for reporting the results from each analyses.

SAMPLE DESCRIPTION INFORMATION

for

Engineering Science - Bloomfield Refining Company

<u>RMA Sample No.</u>	<u>Sample Description</u>	<u>Sample Type</u>	<u>Date Sampled</u>	<u>Date Received</u>
51469-01	L1 & L2, 0-6" Quadrant #1 - Landfill	Soil	10/16/85	10/19/85
51469-02	L3 & L4, 6-12" Quadrant #1 - Landfill	Soil	10/16/85	10/19/85
51469-03	L5 & L6, 0-6" Quadrant #2 - Landfill	Soil	10/16/85	10/19/85
51469-04	L7 & L8, 6-12" Quadrant #2 - Landfill	Soil	10/16/85	10/19/85
51469-05	L9 & L10, 0-6" Quadrant #3 - Landfill	Soil	10/16/85	10/19/85
51469-06	L11 & L12, 6-12" Quadrant #3 - Landfill	Soil	10/16/85	10/19/85
51469-07	L13 & L14, 0-6" Quadrant #4 - Landfill	Soil	10/16/85	10/19/85
51469-08	L15 & L16, 6-12" Quadrant #4 - Landfill	Soil	10/16/85	10/19/85
51469-09	LP1 & LP2, 0-6" Points 1 & 2 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-10	LP3 & LP4, 6-12" Points 1 & 2 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-11	LP5 & LP6, 0-6" Points 3 & 4 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-12	LP7 & LP8, 6-12" Points 3 & 4 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-13	LP9 & LP10, 0-6" Points 5 & 6 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-14	LP11 & LP12, 6-12" Points 5 & 6 @ Landfill Pond	Soil	10/16/85	10/19/85
51469-15	LP13 & LP14, 0-6" S. Evaporation Pond - Landfill Pond	Soil	10/16/85	10/19/85
51469-16	MS1 & MS2, Mystery Sample	Soil	10/16/85	10/19/85
51469-17	APS1 & APS2, 0-6" NE & SE of South API Pond	Soil	10/15/85	10/19/85
51469-18	APS3 & APS4, 6-12" NE & SE of South API Pond	Soil	10/15/85	10/19/85
51469-19	APS5 & APS6, 0-6" N & S of South API Pond	Soil	10/15/85	10/19/85
51469-20	APS7 & APS8, 6-12" N & S of South API Pond	Soil	10/15/85	10/19/85

SAMPLE DESCRIPTION INFORMATION

for

Engineering Science - Bloomfield Refining Company

(Continued)

<u>RMA Sample No.</u>	<u>Sample Description</u>	<u>Sample Type</u>	<u>Date Sampled</u>	<u>Date Received</u>
51469-21	APS9 & APS10, 0-6" NW & SW of South API Pond	Soil	10/15/85	10/19/85
51469-22	APS11 & APS12, 6-12" NW & SW of South API Pond	Soil	10/15/85	10/19/85
51469-23	APS13, 0-6" SE near influent S. API Pond	Soil	10/15/85	10/19/85
51469-24	APN1 & APN2, 0-6" NE & SE of North API Pond	Soil	10/15/85	10/19/85
51469-25	APN3 & APN4, 6-12" NE & SE of North API Pond	Soil	10/15/85	10/19/85
51469-26	APN5 & APN6, 0-6" N & S of North API Pond	Soil	10/15/85	10/19/85
51469-27	APN7 & APN8, 6-12" N & S of North API Pond	Soil	10/15/85	10/19/85
51469-28	APN9 & APN10, 0-6" NW & SW of North API Pond	Soil	10/15/85	10/19/85
51469-29	APN11 & APN12, 6-12" NW & SW of North API Pond	Soil	10/15/85	10/19/85

May 28, 1986

TABLE 1. APPENDIX VIII HAZARDOUS CONSTITUENT SUBSET FOR PETROLEUM REFINERY STUDIES*

Volatile Organics

Benzene
 Carbon Disulfide
 Chlorobenzene
 Chloroform
 1,2-Dibromoethane
 1,2-Dichloroethane
 1,4-Dioxane
 Methyl ethyl ketone
 Styrene
 Ethyl Benzene
 Toluene
 Xylenes
 Xylenes, m
 Xylenes, o & p

Base/Neutral Organics

Anthracene
 Benz(a)anthracene
 Benzo(b)fluoranthene
 Benzo(j)fluoranthene
 Benzo(k)fluoranthene
 Benzo(a)pyrene
 Bis(2-ethylhexyl)phthalate
 Butyl benzyl phthalate
 Chrysene
 Dibenz(a,h)acridine
 Dibenz(a,h)anthracene
 Di-n-butyl phthalate

Base/Neutral Organics (Cont.)

Dichlorobenzenes
 o-Dichlorobenzene
 m-Dichlorobenzene
 p-Dichlorobenzene
 Diethyl phthalate
 7,12-Dimethylbenz(a)anthracene
 Dimethyl phthalate
 Di-n-octyl phthalate
 Fluoranthene
 Indene
 Methyl chrysene
 1-Methylnaphthalene
 Naphthalene
 Phenanthrene
 Pyrene
 Pyridine
 Quinoline

Acid Organics

Benzenethiol
 Cresols
 o-Cresol
 p&m-Cresol
 2,4-Dimethylphenol
 2,4-Dinitrophenol
 4-Nitrophenol
 Phenol

*"Petitions to Delist Hazardous Wastes, A Guidance Manual," EPA/530-SW-85-003, April, 1985.

II. RESULTS

The analytical results are presented in the data tables in this section. The data are organized into the tables described below:

- o Phenolics,
- o Total Chromium and Lead,
- o Skinner Volatile Organics,
- o Skinner Base/Neutral Organics,
- o Skinner Acid Organics, and
- o Volatile Aromatics.

For each of the parameters in the phenolics and the metals tables, the result and detection limit is present for each sample. The term ND is used to indicate the parameter was not detected at the detection limit shown.

The term BDL (Below Detection Limit) is used in the skinner organic results tables to indicate that the compound is not present at the detection limit shown. The detection limits for the Appendix VIII organic compounds were obtained from a study of the analytical methods performed by RMAL under contract to the American Petroleum Institute (API)¹. Analytical standards are not available for three compounds. These compounds cannot be measured; they have been listed in the results tables and have been footnoted to show that standards were not available.

As explained in more detail in the analytical methodology section, the samples were screened prior to analysis in order to optimize the detection limit for each sample and minimize instrumental problems associated with analyzing samples containing

¹"Recovery and Detection Limits of Organic Compounds in Petroleum Refinery Wastes", January 25, 1985.

relatively high concentrations. This process resulted in high dilutions for several samples containing high concentrations of the target compounds. For these samples, the detection limits for compounds not detected are proportionately high. Also, the compounds which were reported close to (less than two times) the detection limits may be suspect.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

PHENOLICS

<u>Parameter</u>	<u>51469-01</u>	<u>51469-02</u>	<u>51469-03</u>	<u>51469-04</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-05</u>	<u>51469-06</u>	<u>51469-07</u>	<u>51469-08</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-09</u>	<u>51469-10</u>	<u>51469-11</u>	<u>51469-12</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-13</u>	<u>51469-14</u>	<u>51469-15</u>	<u>51469-16</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-17</u>	<u>51469-18</u>	<u>51469-19</u>	<u>51469-20</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-21</u>	<u>51469-22</u>	<u>51469-23</u>	<u>51469-24</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg

ND = Not detected.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

PHENOLICS (Continued)

<u>Parameter</u>	<u>51469-25</u>	<u>51469-26</u>	<u>51469-27</u>	<u>51469-28</u>
Phenolics	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
<u>Units</u>	mg/kg	mg/kg	mg/kg	mg/kg
<u>Parameter</u>	<u>51469-29</u>			
Phenolics	ND (0.1)			
<u>Units</u>	mg/kg			

ND = Not detected.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company**CHROMIUM AND LEAD**

<u>Parameter</u>	<u>Units</u>	<u>51469-01</u>	<u>51469-02</u>	<u>51469-03</u>	<u>51469-04</u>
Chromium	mg/kg	11 (0.5)	8.9 (0.5)	9.9 (0.5)	7.6 (0.5)
Lead	mg/kg	10 (2.5)	9.8 (2.5)	9.0 (2.5)	6.7 (2.5)
<u>Parameter</u>	<u>Units</u>	<u>51469-05</u>	<u>51469-06</u>	<u>51469-07</u>	<u>51469-08</u>
Chromium	mg/kg	7.8 (0.5)	7.4 (0.5)	9.1 (0.5)	7.0 (0.5)
Lead	mg/kg	7.6 (2.5)	7.0 (2.5)	8.2 (2.5)	7.7 (2.5)
<u>Parameter</u>	<u>Units</u>	<u>51469-09</u>	<u>51469-10</u>	<u>51469-11</u>	<u>51469-12</u>
Chromium	mg/kg	6.2 (0.5)	8.1 (0.5)	7.8 (0.5)	10 (0.5)
Lead	mg/kg	9.0 (2.5)	8.5 (2.5)	8.9 (2.5)	12 (2.5)
<u>Parameter</u>	<u>Units</u>	<u>51469-13</u>	<u>51469-14</u>	<u>51469-15</u>	<u>51469-16</u>
Chromium	mg/kg	8.0 (0.5)	7.8 (0.5)	2.3 (0.5)	2.4 (0.5)
Lead	mg/kg	12 (2.5)	13 (2.5)	4 (2.5)	4 (2.5)
<u>Parameter</u>	<u>Units</u>	<u>51469-17</u>	<u>51469-18</u>	<u>51469-19</u>	<u>51469-20</u>
Chromium	mg/kg	4.4 (0.5)	5.3 (0.5)	5.5 (0.5)	14 (0.5)
Lead	mg/kg	5 (2.5)	5 (2.5)	5 (2.5)	4 (2.5)

Detection limits in parentheses.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company**CHROMIUM AND LEAD (Cont.)**

<u>Parameter</u>	<u>Units</u>	<u>51469-21</u>	<u>51469-22</u>	<u>51469-23</u>	<u>51469-24</u>
Chromium	mg/kg	6.8 (0.5)	27 (0.5)	4.9 (0.5)	7.8 (0.5)
Lead	mg/kg	5.1 (2.5)	5.9 (2.5)	6.0 (2.5)	4 (2.5)
<u>Parameter</u>	<u>Units</u>	<u>51469-25</u>	<u>51469-26</u>	<u>51469-27</u>	<u>51469-28</u>
Chromium	mg/kg	3.2 (0.5)	3.6 (0.5)	2.3 (0.5)	2.9 (0.5)
Lead	mg/kg	3 (2.5)	5 (2.5)	3 (2.5)	3 (2.5)

<u>Parameter</u>	<u>Units</u>	<u>51469-29</u>
Chromium	mg/kg	12 (0.5)
Lead	mg/kg	4 (2.5)

Detection limits in parentheses.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

VOLATILE AROMATICS - GC/PID

<u>Parameter</u>	<u>Units</u>	<u>51469-01</u>	<u>51469-02</u>	<u>51469-03</u>	<u>51469-04</u>
Benzene	ug/kg	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylene, m	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes, o & p	ug/kg	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-05</u>	<u>51469-06</u>	<u>51469-07</u>	<u>51469-08</u>
Benzene	ug/kg	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylene, m	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes, o & p	ug/kg	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-09</u>	<u>51469-10</u>	<u>51469-11</u>	<u>51469-12</u>
Benzene	ug/kg	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylene, m	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes, o & p	ug/kg	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-13</u>	<u>51469-14</u>	<u>51469-15</u>	<u>51469-16</u>
Benzene	ug/kg	1.3 (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylene, m	ug/kg	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes, o & p	ug/kg	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)

ND = Not detected.

Detection limits in parentheses.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

(Continued)

VOLATILE AROMATICS - GC/PID

<u>Parameter</u>	<u>Units</u>	<u>51469-17</u>	<u>51469-18</u>	<u>51469-19</u>	<u>51469-20</u>
Benzene	ug/kg	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	(0.5)	(0.5)	(0.5)
Toluene	ug/kg	ND	(1.0)	(1.0)	(1.0)
Xylene, m	ug/kg	ND	(1.0)	(1.0)	(1.0)
Xylenes, o & p	ug/kg	5.3	(1.0)	(4.0)	(2.0)
	ug/kg	2.1	(3.0)	(2.0)	(4.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-21</u>	<u>51469-22</u>	<u>51469-23</u>	<u>51469-24</u>
Benzene	ug/kg	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	(0.5)	(1.0)	(1.0)
Toluene	ug/kg	ND	(1.0)	(4.0)	(1.0)
Xylene, m	ug/kg	ND	(1.0)	(1.0)	(1.0)
Xylenes, o & p	ug/kg	ND	(1.0)	(1.0)	(1.0)
	ug/kg	ND	(4.0)	(2.0)	(2.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-25</u>	<u>51469-26</u>	<u>51469-27</u>	<u>51469-28</u>
Benzene	ug/kg	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	(0.5)	(0.5)	(0.5)
Toluene	ug/kg	ND	(1.0)	(1.0)	(1.0)
Xylene, m	ug/kg	ND	(1.0)	(1.0)	(1.0)
Xylenes, o & p	ug/kg	ND	(1.0)	(1.0)	(1.0)
	ug/kg	ND	(2.0)	(2.0)	(2.0)
<u>Parameter</u>	<u>Units</u>	<u>51469-29</u>			
Benzene	ug/kg	ND	(0.5)		
Ethylbenzene	ug/kg	ND	(1.0)		
Toluene	ug/kg	ND	(1.0)		
Xylene, m	ug/kg	ND	(1.0)		
Xylenes, o & p	ug/kg	ND	(2.0)		

ND = Not detected.

Detection limits in parentheses.

*Analyses incomplete.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

PERCENT MOISTURE

<u>Sample Number</u>	<u>Percent Moisture</u>	<u>Sample Number</u>	<u>Percent Moisture</u>
51469-01	4%	51469-16	4%
51469-02	5%	51469-17	9%
51469-03	4%	51469-18	10%
51469-04	3%	51469-19	10%
51469-05	3%	51469-20	8%
51469-06	3%	51469-21	6%
51469-07	6%	51469-22	6%
51469-08	4%	51469-23	8%
51469-09	23%	51469-24	5%
51469-10	14%	51469-25	5%
51469-11	18%	51469-26	7%
51469-12	13%	51469-27	5%
51469-13	22%	51469-28	4%
51469-14	14%	51469-29	4%
51469-15	28%		

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

SKINNER VOLATILE ORGANICS, SOIL

Parameter	Units	51469-15	51469-16	51469-23
Acrolein	ug/kg	BDL (30)	BDL (30)	BDL (30)
Acrylonitrile*	ug/kg	-	-	-
Benzene	ug/kg	BDL (5)	BDL (5)	BDL (5)
Carbon disulfide	ug/kg	BDL (5)	BDL (5)	BDL (5)
Carbon tetrachloride	ug/kg	BDL (5)	BDL (5)	BDL (5)
Chlorobenzene	ug/kg	BDL (5)	BDL (5)	BDL (5)
Chloromethane	ug/kg	BDL (10)	BDL (10)	BDL (10)
1,2 Dibromoethane	ug/kg	BDL (20)	BDL (20)	BDL (20)
Chloroform	ug/kg	BDL (5)	BDL (5)	BDL (5)
Dichloromethane	ug/kg	BDL (10)	BDL (10)	BDL (10)
1,1-Dichloroethane	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,2-Dichloroethane	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,1-Dichloroethylene	ug/kg	BDL (5)	BDL (5)	BDL (5)
Dichloropropane	ug/kg	BDL (5)	BDL (5)	BDL (5)
Methyl ethyl ketone	ug/kg	BDL (10)	53 (10)	BDL (10)
Styrene	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,1,2,2-Tetrachloroethane	ug/kg	BDL (5)	BDL (5)	BDL (5)
Tetrachloroethylene	ug/kg	BDL (5)	BDL (5)	BDL (5)
Toluene	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,2-trans-Dichloroethylene	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,1,1-Trichloroethane	ug/kg	BDL (5)	BDL (5)	BDL (5)
1,1,2-Trichloroethane	ug/kg	BDL (5)	BDL (5)	BDL (5)
Trichloroethylene	ug/kg	BDL (5)	BDL (5)	BDL (5)

BDL = Below detection limit. Detection limits in parentheses.

*Not consistently recovered using Method 8240.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

SKINNER BASE/NEUTRAL ORGANICS, SOILS

Parameter	Units	51469-15	51469-16	51469-23
Anthracene	ug/kg	BDL	BDL (400)	BDL (400)
Benzidine	ug/kg	BDL	BDL (4000)	BDL (4000)
Benz(c)acridine**	ug/kg	-	-	-
Benzo(a)anthracene	ug/kg	BDL	BDL (400)	BDL (400)
Benzo(a)pyrene	ug/kg	BDL	BDL (400)	BDL (400)
Benzo (b) fluoranthene	ug/kg	BDL	BDL (400)	BDL (400)
Benzo (k) fluoranthene	ug/kg	BDL	BDL (400)	BDL (400)
Bis (2-chloroethyl)ether	ug/kg	BDL	BDL (400)	BDL (400)
Bis (2-chloroisopropyl)ether	ug/kg	BDL	BDL (400)	BDL (400)
Bis (2-ethylhexyl)phthalate	ug/kg	BDL	BDL (400)	BDL (400)
Butyl benzyl phthalate	ug/kg	BDL	BDL (400)	BDL (400)
2-Chloronaphthalene	ug/kg	BDL	BDL (400)	BDL (400)
Chrysene	ug/kg	-	-	-
Dibenz(a,h)acridine**	ug/kg	-	-	-
Dibenz(a,i)acridine	ug/kg	BDL	BDL (400)	BDL (400)
7,12-DimethylBenz(a)anthracene	ug/kg	BDL	BDL (400)	BDL (400)
Dibenz(a,h) anthracene	ug/kg	BDL	BDL (400)	BDL (400)
7H Dibenzo(c,g)carbazole	ug/kg	BDL	BDL (400)	BDL (400)
1,2-Dichlorobenzene	ug/kg	BDL	BDL (400)	BDL (400)
1,3-Dichlorobenzene	ug/kg	BDL	BDL (400)	BDL (400)
1,4-Dichlorobenzene	ug/kg	BDL	BDL (400)	BDL (400)
Diethyl phthalate	ug/kg	BDL	BDL (400)	BDL (400)
Dimethyl phthalate	ug/kg	BDL	BDL (400)	BDL (400)
Di-n-butyl phthalate	ug/kg	BDL	BDL (400)	BDL (400)
2,4-Dinitrotoluene	ug/kg	BDL	BDL (400)	BDL (400)
2,6-Dinitrotoluene	ug/kg	BDL	BDL (400)	BDL (400)
Di-n-octyl phthalate	ug/kg	BDL	BDL (400)	BDL (400)
1,2-Diphenylhydrazine*	ug/kg	BDL	BDL (400)	BDL (400)
Fluoranthene	ug/kg	BDL	BDL (400)	BDL (400)

BDL = Below detection limit. Detection limits in parentheses. *Measured as azobenzene.

**Not consistently recovered using Method 8270, or no analytical standard available.

ANALYTICAL RESULTS

for

Engineering Science - Bloomfield Refining Company

SKINNER BASE/NEUTRAL ORGANICS, SOIL (Cont.)

Parameter	Units	51469-15	51469-16	51469-23
Indene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Indeno(1,2,3-cd)pyrene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Methyl Benz(c)phenanthrene	ug/kg	BDL (400)	BDL (400)	BDL (400)
3-Methylcholanthrene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Methyl Chrysene**	ug/kg	-	-	-
Naphthalene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Nitrobenzene	ug/kg	BDL (400)	BDL (400)	BDL (400)
n-Nitrosodietylamine	ug/kg	BDL (400)	BDL (400)	BDL (400)
5-Nitroacenaphthene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Quinoline	ug/kg	BDL (400)	BDL (400)	BDL (400)
Phenanthrene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Pyrene	ug/kg	BDL (400)	BDL (400)	BDL (400)
1,2,4-Trichlorobenzene	ug/kg	BDL (400)	BDL (400)	BDL (400)
Trimethyl Benz(a)anthracene	ug/kg	BDL (400)	BDL (400)	BDL (400)

SKINNER ACID ORGANICS

Parameter	Units	51469-15	51469-16	51469-23
2-Chlorophenol	ug/kg	BDL (400)	BDL (400)	BDL (400)
3-Cresol	ug/kg	BDL (400)	BDL (400)	BDL (400)
m/p-Cresol	ug/kg	BDL (400)	BDL (400)	BDL (400)
2,4-Dimethylphenol	ug/kg	BDL (400)	BDL (400)	BDL (400)
1,6-Dinitro-o-phenol	ug/kg	BDL (2000)	BDL (2000)	BDL (2000)
1,4-Dinitrophenol	ug/kg	BDL (4000)	BDL (4000)	BDL (4000)
3-Nitrophenol	ug/kg	BDL (400)	BDL (400)	BDL (400)
1-Nitrophenol	ug/kg	BDL (800)	BDL (800)	BDL (800)
2-Chloro-m-cresol	ug/kg	BDL (400)	BDL (400)	BDL (400)
2,4-Dichlorophenol	ug/kg	BDL (400)	BDL (400)	BDL (400)
2,4,6-Trichlorophenol	ug/kg	BDL (400)	BDL (400)	BDL (400)

BDL = Below detection limit. Detection limits in parentheses.

**Not consistently recovered using Method 8270, or no analytical standard available.

III. ANALYTICAL METHODOLOGY

The methods for the metals and organic compounds were derived from three sources of EPA methods, 1) the methods promulgated in 40 CFR 136 for priority pollutants, 2) the methods published in SW-846 and 3) methods developed by the EPA-EMSL/LV for Superfund investigations, as well as several documents published by the EPA and RMAL in 1984 and 1985. These methods all use the same generic technology as summarized below:

- o Metals, acid digestion followed by analysis by ICP supported by graphite furnace AA,
- o Volatile Organics, purge and trap GC/MS, and
- o Semivolatile (base/neutral and acid) organics, solvent extraction followed by capillary column GC/MS.

The EPA (40 CFR 136, SW-846 and Superfund) methods were, to a large degree, developed and validated to determine the priority pollutants in a broad spectrum of environmental samples. Between October 1983 and July 1985 the EPA released three methods manuals and a "Guidance Manual" which were compendiums of modified SW-846 methods specifically adapted for the analysis of Appendix VIII constituents in petroleum refining wastes (not water samples). The most useful of these documents was an October, 1984 draft methods manual which unfortunately was never formally distributed by EPA, apparently in order to avoid a conflict with a proposed rule in the October 1, 1984 Federal Register. However, even this document (as discussed by an RMAL review for API in December, 1984) lacked many important details that are critical to the successful analysis of environmental samples impacted by petroleum refineries.

Thus, although the methods used by RMAL were based on these various EPA documents, the actual details of each method were implemented by RMAL as explained in more detail below. The various documents which were used to establish RMAL's approach are listed in a bibliography. The discussion below references method numbers in SW-846. However, it should be noted that several different versions of these methods are cited in the various EPA documents. In addition to the documents listed in the bibliography, RMAL has continued a dialogue through phone conversations and meetings with EPA/OSW to ensure that this approach is in line with the Agency's expectations. Much of RMAL's approach is being incorporated in pending Agency promulgations.

Total Metals

Metals were determined using inductively coupled plasma-atomic emission spectroscopy (ICP). Prior to analysis, the samples were prepared using Method 3050. The ICP was preprogrammed to perform off peak background correction on both the high and low wavelength sides of the analytical peaks of interest as appropriate. One hundred interelemental corrections were also automatically applied to the analysis. A matrix spike is analyzed as a quality control check for the ICP analyses.

Skinner Volatile Organics

Volatile organic compounds were determined by purge and trap gas chromatography/mass spectrometry (GC/MS) using Method 8240 with the appropriate sample introduction procedure. The appropriate procedure was determined using a screening procedure consisting of a liquid-liquid extraction with hexadecane followed by direct injection of an aliquot of the extract into a gas chromatograph with flame ionization detection (GC/FID). All volatile samples were screened in this way before GC/MS analysis. The GC/FID screening results were evaluated to determine the amount of sample to use that provides the lowest detection limits possible without overloading the GC/MS system.

Skinner Semivolatile Organics

Semivolatile organics were determined by capillary column GC/MS using SW-846 Method 8270. Soil samples were extracted using SW-846 Sonication Method 3550. After extraction, the samples were subjected to Method 3530 to separate the extract into acidic and basic fractions. The basic fraction was then cleaned up using Method 3570 to generate aliphatic and aromatic fractions. GC/MS analyses were then performed on the acidic and aromatic fractions.

Identification and quantitation of the target compounds determined by GC/MS were performed according to the process described in Methods 8240 and 8270. In summary, this process has the following features:

- o Multipoint calibration for each compound to establish instrument response using multiple internal standards,

- o Identification of compounds using a computerized reverse search with selected key fragment ions, and
- o Quantitation using the previously determined response factors.

Volatile Aromatics

The samples were analyzed for benzene, ethyl benzene, toluene, and xylenes using purge and trap methodology to extract and concentrate the volatile compounds. The samples were desorbed into a gas chromatograph equipped with a photoionization detector (P.I.D.). Identification and quantitation were determined using internal and external standards.

Phenolics

Phenolics were determined colorimetrically using SW-846 Method 9065.

V. BIBLIOGRAPHY

A. Documents Pertaining to Appendix VIII Constituents

- 1) January, 1984 letter from Myles Morse pertaining to delisting petitions as well as land treatment demonstrations, including sampling procedures and data requirements.
- 2) March, 1984 letter to delisting petitioners from Barbara Bush revising target parameters.
- 3) April, 1984 memo from John Skinner to Permit Branch Chiefs concerning land treatment containing target parameters and analytical methods.
- 4) May, 1984 memo from John Skinner clarifying previous memo.
- 5) September, 1984 letter to Petitioners from Barbara Bush distributing Refinery Handbook.
- 6) November, 1984 letter from Eileen Claussen to all delisting petitioners describing new RCRA requirements.
- 7) May 3, 1985 RMAL Memo.
- 8) January 8, 1985 RMAL letter to Eileen Claussen, EPA-OSW.

B. Documents Pertaining to Analytical Methods

- 1) "Handbook for the Analysis of Petroleum Refinery Residuals and Waste", October, 1984 - prepared by Radian Corporation for EPA/OSW.
- 2) "Evaluation of the Applicability of the SW-846 Manual To Support All RCRA Subtitle C Testing", December 20, 1984 - prepared by Rocky Mountain Analytical Laboratory for API.
- 3) "Comments on the 'Handbook for the Analysis of Petroleum Refinery Residuals and Waste, October, 1984'", December 12, 1984 - prepared by Rocky Mountain Analytical Laboratory for API.
- 4) "Comments on the 'Handbook for the Analysis of Petroleum Refinery Residuals and Waste, April 2, 1984'", August 15, 1984 - prepared by Rocky Mountain Analytical Laboratory for API.
- 5) "Handbook for the Analysis of Petroleum Refinery Residuals and Waste", April 2, 1984 - prepared by S-Cubed for EPA/OSW.
- 6) EPA document "Guidance for the Analysis of Refinery Wastes", July 5, 1985.
- 7) "Recovery and Detection Limits of Organic Compounds in Petroleum Refinery Wastes", January 25, 1985.
- 8) SW-846 - "Test Methods for Evaluating Solid Waste, Physical Chemical Methods" USEPA, 2nd Edition, 1982.
- 9) 40CFR136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act."



BRUCE KING
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

January 25, 1994

Mr. David Roderick, Refinery Manager
Bloomfield Refining Company
P.O. Box 159
Bloomfield, New Mexico 87413

Dear Mr. Roderick:

RE: Bloomfield Refining Company Landfill Pond Closure Plan
Approval (EPA I.D. No. NMD089416416)

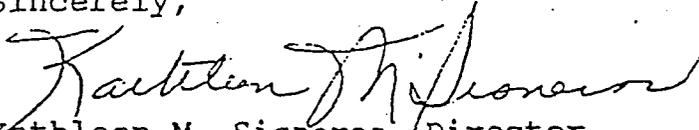
The New Mexico Environment Department (NMED) hereby approves the closure plan for the Bloomfield Refining Company (BRC) landfill pond located near Bloomfield, New Mexico. The approved plan for the landfill pond is contained in the document entitled, "Final Closure Plan for the API Wastewater Ponds, Landfill, and Landfill Pond at the Bloomfield Refinery" dated July 1986. The effective date of the closure plan approval is the date you receive this letter.

The Hazardous and Radioactive Materials Bureau (HRMB) of the NMED released the proposed closure plan and associated documents for a thirty (30) day public comment period which ran from December 10, 1993, through January 9, 1994. The HRMB received one written comment during the public notice period. A copy of the comment is enclosed for your information. The recommendation stated in the comment that BRC take measures to prevent water from ponding in this site for extended periods of time does not require a change in the final approved closure plan. Thus, no changes were made to the proposed closure plan in finalizing our approval. No additional closure activities are required to demonstrate clean closure of the site.

Mr. David Roderick
Page 2
January 25, 1994

Please contact Marc Sides of my staff at (505) 827-4308 if you have any questions

Sincerely,



Kathleen M. Sisneros, Director
Water and Waste Management Division

Enclosure

cc: David Neleigh, EPA Permits
Greg Lyssy, EPA Enforcement
Mark Wilson, US Fish and Wildlife
Benito Garcia, HRMB
Barbara Hoditschek, HRMB
Marc Sides, HRMB
File - Red

Appendix C

Spray Irrigation Area (SWMU No. 11) Historical Documentation



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

August 28, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-604

Mr. Lynn Shelton
Environmental Manager
Giant Industries
P.O. Box 159
Bloomfield, NM 87413

RE: Closure Plan for the Unlined Evaporation
Lagoons and the Spray Evaporation Area.
Date August 13, 1996.

Dear Mr. Shelton:

The New Mexico Oil Conservation Division (OCD) has reviewed the above captioned plan from Giant regarding the closure/modification of the "Unlined Evaporation Lagoons/Spray Evaporation Area." The OCD approves of the closure and modification as proposed with the following conditions:

1. The monitoring and sampling of monitoring wells MW-1 and MW-5 will continue as previously approved. When the CMS (dated December 21, 1995) is approved, OCD will be open to reconsidering the continued monitoring of MW-1 and MW-5.
2. Any discharge/spill or leak that is a result of the modification/construction will be reported to the OCD Aztec District office at (505)-334-6178 pursuant to WQCC 1203 and OCD Rule 116.

Please note, OCD approval does not relieve Giant for liability should this closure/modification result in contamination to surface water, groundwater, or the environment. Further, OCD approval does not relieve Giant from responsibility with other Federal, State, or Local Regulations that may apply. Public notice was not issued because this modification was part of the previous discharge plan renewal conditions.

If Giant has any questions regarding this matter please feel free to call me at (505)-827-7152.

Sincerely,

Roger C. Anderson
Bureau Chief

xc: Mr. Denny Foust - Environmental Geologist

**CLOSURE PLAN
FOR THE
UNLINED EVAPORATION LAGOONS
AND THE
SPRAY EVAPORATION AREA**

**GIANT REFINING COMPANY - BLOOMFIELD
#50 COUNTY ROAD 4990
BLOOMFIELD, NEW MEXICO**

PREPARED FOR:

NEW MEXICO OIL CONSERVATION DIVISION

PREPARED BY:

**LYNN SHELTON
ENVIRONMENTAL MANAGER
GIANT REFINING COMPANY - BLOOMFIELD**

AUGUST 13, 1996

TABLE OF CONTENTS

I.	Introduction	1
II.	General Information	1
III.	Background Information	1-2
IV.	Geology / Hydrology	2
V.	Sampling and Analysis	2
VI.	Discussion of Analytical Results	2-3
VII.	Closure	3
VIII.	Future Use of the Units	3
IX.	Conclusion	3

**CLOSURE PLAN FOR THE UNLINED EVAPORATION LAGOONS
AND THE
SPRAY EVAPORATION AREA**

**GIANT REFINING COMPANY - BLOOMFIELD
DISCHARGE PLAN GW-001**

I. INTRODUCTION:

The Unlined Evaporation Lagoons and the Spray Evaporation Area (see Site Plan, Attachment A) have been identified in the Discharge Plan as units to be closed. Giant Refining Company - Bloomfield (GRC) has assumed the responsibility for entering into closure of those units. This closure plan will outline the closure activities and the subsequent uses of those units.

II. GENERAL INFORMATION:

1. Name of Discharger, Operator, and Owner

San Juan Refining Company
P.O. Box 159
Bloomfield, New Mexico 87413
(505) 632 8013

2. Facility Contacts

Lynn Shelton, Environmental Manager

3. Location of Facility

286.93 acres, more or less, being that portion of the NW1/4 NE1/4 and the S1/2 NE1/4 and the N1/2 NE1/4 SE1/4 of Section 27, and the S1/2 NW1/4 and the N1/2 NW1/4 SW1/4 and the SE1/4 NW1/4 SW1/4 and the NE1/4 SW1.4 of Section 26, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico.

4. Type of Operation

Giant Refining Company - Bloomfield (GRC) is a petroleum refinery with a nominal crude capacity in barrels per calendar day (bpcd) of 18,000. Processing units include crude desalting, crude distillation, catalytic hydrotreating, catalytic reforming, fluidized catalytic cracking, catalytic polymerization, diesel hydrodesulfurization, gas concentration and treating, and sulfur recovery.

Crude supplies are delivered by pipeline and tank trucks. Products are sold, via tank trucks, from a product terminal operated by GRC.

III. BACKGROUND INFORMATION:

The Unlined Evaporation Lagoons consist of two earthen dike lagoons (lined with 4-6 inches of bentonite) of approximately 2.5 acres each. The process wastewater effluent flowed from the

North Oily Water Pond into the north Unlined Lagoon and then into the south Unlined Lagoon. The water evaporated in place or was transferred to the Spray Evaporation Area to enhance evaporation. Studies showed the lagoons to seep water at a rate of 10 to 20 gallons per minute. Monitor Well MW-1, which is immediately down-gradient of the lagoons, has traditionally been sampled semi-annually to detect any contamination of the uppermost perched water table that might be associated with the seepage from these lagoons.

After completion of the Class I injection well, the ponds were decommissioned in 1994 and scheduled for closure. The water remaining in the ponds was allowed to evaporate. Soil samples around the lagoons were collected and analyzed in 1993 during the RCRA Facility Investigation and found to be non-hazardous.

The Spray Evaporation Area was used to spray process water from the Unlined Evaporation Lagoons to enhance evaporation. Although diked to prevent runoff, the area did not typically store water. Because of the dikes, the RFI study concluded that the Spray Evaporation Area as well as the Unlined Evaporation Lagoons were unlikely to allow runoff to contaminate surface waters. Monitor Well MW-5 is immediately down-gradient of the evaporation area and has been traditionally sampled semi-annually to detect any contamination to the uppermost perch water table as a result from seepage from the spray evaporation activities.

The Spray Evaporation Area was decommissioned in 1994.

GRC is preparing this Closure Plan as required by the facility's Discharge Plan GW-001, Section 6.1.4 and the Attachment To The Discharge Plan GW-001 Approval Letter, dated January 29, 1996.

IV. GEOLOGY / HYDROLOGY:

Geology and hydrology at the refinery are amply documented in the Discharge Permit GD-001, Section 9.0, Site Characteristics, and is included here by reference.

V. SAMPLING AND ANALYSIS:

GRC arranged for a technician from Philip Environmental to sample the Unlined Evaporation Lagoons, the Spray Evaporation Area, and a background sample on July 10, 1996. The samples were collected according to standard SW-846 protocol at sampling points selected by GRC and approved by the Oil Conservation Division. The sampling event of July 10, 1996 was witnessed by Mr. Denny Foust of the OCD Aztec office.

A copy of the sampling site drawings, the Soil Sample Identification Numbering System, the WQCC constituent list (including both the WQCC standard and the lab reporting limits), the approval letter from OCD dated June 20, 1996, and the soil sampling report from Philip Environmental are included as Attachment B.

The soil samples were analyzed by Inter-Mountain Laboratories, Inc. in Farmington, New Mexico. The results of those analyses were tabulated to expedite reference. The original and tabulated analytical data is presented in Attachment C.

VI. DISCUSSION OF ANALYTICAL RESULTS:

Analytical data indicates that no organic hydrocarbons were detected in either the Unlined Evaporation Lagoons or the Spray Evaporation Area. Elevated levels of some metals over the background sample were observed, particularly Iron and Aluminum. Chromium and Lead were detected at very near background levels, with Selenium not being detected in any sample. Inorganic Chloride and Sulfate were observed at slightly above background levels. pH was observed at relatively neutral levels.

GRC concludes that the analytical data does not present any justification for additional cleanup activities prior to closure and reuse of the affected areas.

VII. CLOSURE:

GRC proposes to enter into clean closure of both the Unlined Evaporation Lagoons and the Spray Evaporation Area. Sampling and analysis performed in 1993 and 1996 has demonstrated that there is no evidence of potential releases at the facility from any future use of either unit. Future uses of the units, which is described below, either make beneficial use of the unit (Unlined Evaporation Lagoons) or require site work at the unit (Spray Evaporation Area) that is similar to what would be performed in normal closure.

Based on the above conclusions, GRC proposes that no additional closure activity other than those described below will be required. Furthermore, GRC proposes that the semi-annual sampling and analysis of monitoring wells MW-1 and MW-5 be discontinued.

VIII. FUTURE USE OF THE UNITS:

GRC proposes to use the decommissioned Unlined Evaporation Lagoons as fresh water make-up ponds. These two lagoons would replace the two smaller make-up ponds that are presently in service. The additional capacity of the new lagoons would provide GRC with additional flexibility in the use of the river water make-up via additional settling time for suspended solids, particularly when the river is turbid, and additional capacity in case of river pump failure. The use of the unlined evaporation lagoons will not create an increased possibility of contamination to the uppermost perched water table. Furthermore, the seepage rates of the two sets of lagoons are nearly identical.

GRC proposes to use the Spray Evaporation Area as the site for Giant's Pipeline and Transportation truck shop and parking area as well as an office complex. Civil work performed at the site will be essentially the same as would be performed by installing and grading a soil cap under normal closure activities. The entire site would be graded and profiled to provide for construction of the new facilities which would eliminate the dikes in the spray evaporation area.

IX. CONCLUSION:

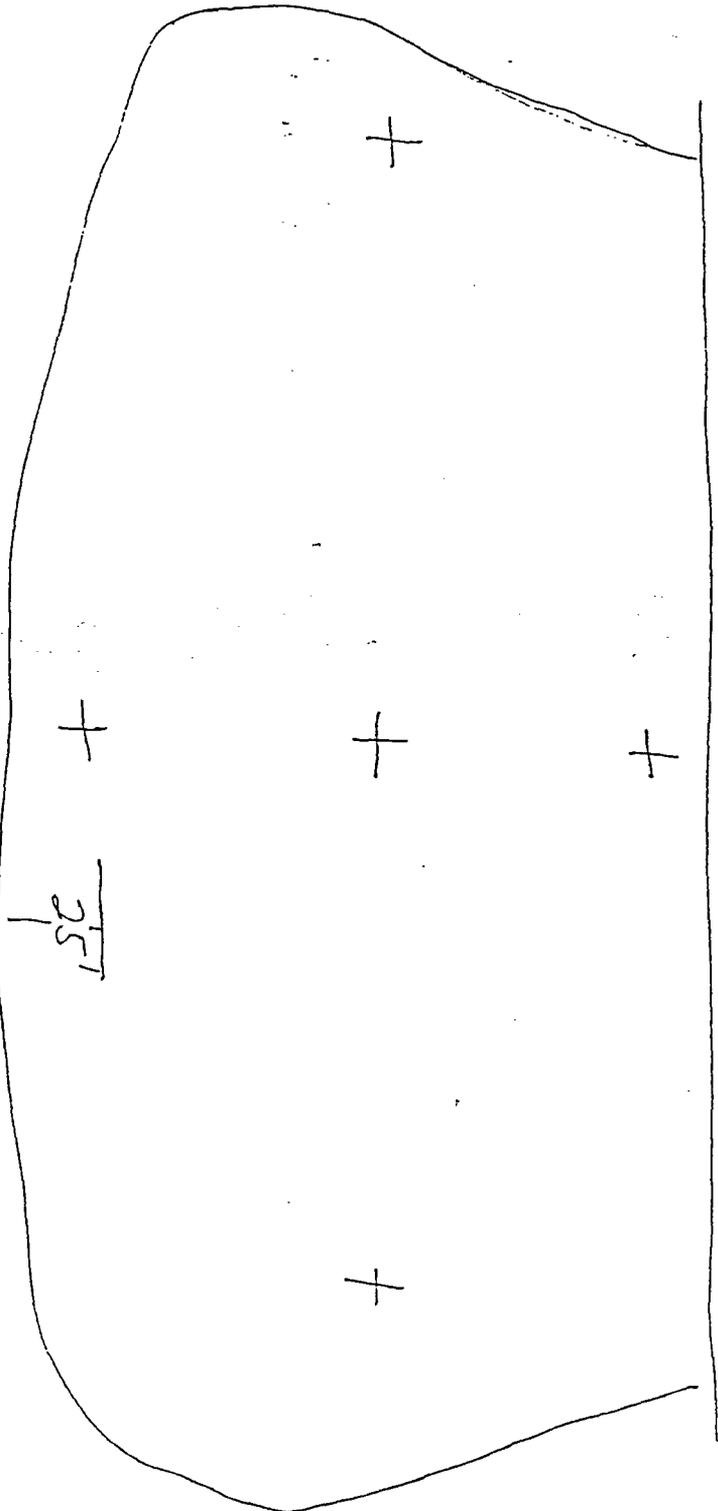
GRC has provided analytical data that corroborates the 1993 RFI data that indicates that no concentrations of hazardous constituents exist in either the Unlined Evaporation Lagoons or the Spray Evaporation Area that would require extraordinary closure activities. The future uses of the affected units will make beneficial use of the land that are occupied by the two units.

ATTACHMENT A

ATTACHMENT B

EVAPORATION SPRAY AREA

96E-0-1
96E-3-5



NOT TO SCALE TJS 7/1/96

**SOIL SAMPLE IDENTIFICATION
NUMBERING SYSTEM**

**OCD SOIL SAMPLING EVENT
JULY 10, 1996
GIANT REFINING COMPANY - BLOOMFIELD**

EXAMPLE:

96 N - 0-1

96	=	1996 Sampling Event
N	=	North Evaporation Lagoon
S	=	South Evaporation Lagoon
E	=	Spray Evaporation Area
B	=	Background Sample
0-1	=	Surface to 1 foot depth interval
3-5	=	Three to five feet depth interval

Total of eight samples, each location composited.

WQCC CONSTITUENT LIST

1996 OCD SAMPLING EVENT

JULY 10, 1996

Parameter	WQCC Standard (mg/l)	Lab Reporting Limit (mg/kg)
Arsenic	0.1	0.25
Barium	1.0	1.0
Cadmium	0.01	0.05
Chromium	0.05	0.5
Cyanide	0.2	0.2
Flouride	1.6	1.6
Lead	0.05	0.25
Total Mercury	0.002	0.2
Nitrate (NO3 as N)	10.0	10.0
Selenium	0.05	0.25
Silver	0.05	0.5
Uranium	5.0	10.0
Benzene	0.01	0.2
Toluene	0.75	0.2
Carbon Tetrachloride	0.01	0.2
1,2-Dichloroethane	0.01	0.2
1,1-Dichloroethylene	0.005	0.2
1,1,2,2-Tetrachloroethylene	0.02	0.2
1,1,2-Trichloroethylene	0.1	0.2
Ethylbenzene	0.75	0.2
Total Xylenes	0.62	0.2
Methylene Chloride	0.1	0.2
Chloroform	0.1	0.2
1,1-Dichloroethane	0.025	0.2
Ethylene Dibromide	0.0001	0.2
1,1,1-Trichloroethane	0.06	0.2
1,1,2-Trichlorethane	0.01	0.2
1,1,2,2-Tetrachloroethane	0.01	0.2
Vinyl Chloride	0.001	0.2
PAHs: total Naphthalenè plus monomethylnaphthalenes	0.03	0.6
Benzo(a)pyrene	0.0007	0.5
Chloride	250	250
Copper	1.0	1.0
Iron	1.0	1.25
Manganese	0.2	0.5
Phenols	0.005	1.0
Sulfate (SO4)	600	600
Zinc	10	10.0
pH	6 to 9	6 to 9
Aluminum	5.0	5.0
Boron	0.75	2.5
Cobalt	0.05	0.5
Molybdenum	1.0	1.0
Nickel	0.2	0.5



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

June 20, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-594-835-145

Mr. Lynn Shelton
Environmental Manager
Giant Industries
P.O. Box 159
Bloomfield, NM 87413

RE: Soil Sampling Parameters
Faxed to OCD on May 6, 1996

Dear Mr. Shelton:

The New Mexico Oil Conservation Division (OCD) has reviewed the Fax submitted from Giant regarding the sampling of the soil underlying the evaporation lagoons. The OCD approves of the list with the requirement that only WQCC 3103 A, B, and C constituents be analyzed for in the soils utilizing approved sample collection and analysis methods as outlined in SW-846 and approved by the EPA. The OCD will require Giant to contact the Santa Fe Office at (505)-827-7156 and Mr. Denny Foust with the District at 334- 6178 one week before the soil samples are taken so that the OCD may have a representative at the site during the sample collection.

Please submit the results with a cover letter discussing the course of action Giant wishes to pursue with the area that are being sampled for these parameters outlined above to the Santa Fe OCD office for approval with a copy sent to Mr. Denny Foust with the Aztec District OCD office.

If Giant has any questions regarding this matter please feel free to call me at (505)-827-7156.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricio W. Sanchez".

Patricio W. Sanchez
Petroleum Engineering Specialist

XC: Mr. Denny Foust



Environmental Services Group
Southern Region

July 22, 1996

Project 16633

Mr. Lynn Shelton
Environmental Manager
Giant Refining Company
P.O. Box 159
Bloomfield, New Mexico 87413

RE: Report for Soil Sampling at Giant Refining Company's Evaporation Spray Areas at the Bloomfield Refinery, Bloomfield, New Mexico

Dear Mr. Shelton:

On July 10, 1996, Philip Environmental Services Corporation (Philip) initiated field work for soil sampling at Giant Refining Company's (Giant) Bloomfield Refinery, Bloomfield, New Mexico. Composite soil samples were collected within two separate Evaporation Lagoons and one Evaporation Spray Area, located at the Bloomfield Refinery, in addition to the collection of two composite background samples.

Sampling activities were conducted in the presence of representatives from Giant and the New Mexico Oil Conservation Division. Samples were preserved on ice and hand delivered by Giant, under chain of custody, to Inter-Mountain Laboratories Inc., in Farmington, New Mexico and were analyzed for New Mexico Water Quality Control Commission (WQCC) parameters, which are presented in Attachment A.

METHODOLOGY

Five-point composite soil samples were collected from two distinct layers within each evaporation Lagoon. One sample point was located in the middle of the Lagoon, with the other four sample points at locations 25 feet from each side of the containment dike in each Lagoon. Sample locations are presented in Attachment B. The first five-point composite sample was collected from the surface to approximately 1 foot below ground surface (bgs). The second five-point composite sample was collected from approximately 3 -5 feet bgs.

In addition to the samples collected within the three Evaporation Lagoons, two background samples were collected from an area upgradient of the Evaporation Lagoons. The background samples were collected from two separate borings, which were composited at intervals of 0 -1 foot bgs and 3 -5 foot bgs.

Page 2
Mr. Lynn Shelton
Giant Refining Co.

Samples were collected from each boring by advancing a stainless steel hand auger to the desired depth, and placing the soil in a stainless steel bowl. After soil was collected from the specified interval from each of the five separate borings within the Lagoon, it was then composited and containerized. Sample containers were labeled with a unique identification number, depth of collection, and sample time and date. Samples were then preserved on ice prior to delivery to the laboratory.

Prior to sample collection, all sampling equipment was decontaminated with an Alconox™ detergent and potable water wash, followed by a propanol rinse. When not in use, sampling equipment was kept covered to avoid potential contamination.

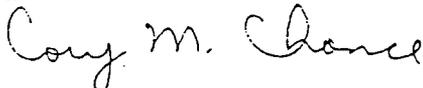
SUMMARY

A total of six five-point composite samples were collected from the Evaporation Lagoons, with two five-point composite samples collected from the background area. Sample identification numbers, locations, and soil descriptions are presented in Soil Sampling Data Sheets in Attachment C. Soil collected from the North Evaporation Lagoon from the 0 -1 foot and 3 -5 foot bgs intervals exhibited a black discolored sandy clay interval. Soil collected from the South Evaporation Lagoon exhibited a dark gray discolored sandy clay interval within the 0 -1 foot bgs sample interval. Samples collected from the spray evaporation area and the background area did not exhibit any visible discoloration.

If you have any questions or require further information, please feel free to contact Cory M. Chance at Philip's Farmington, New Mexico office at (505) 326-2262.

Sincerely,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Cory M. Chance
Geologist

Attachments:

- A. WQCC Analytical Parameters
- B. Sample Locations
- C. Soil Sampling Data forms

ATTACHMENT A

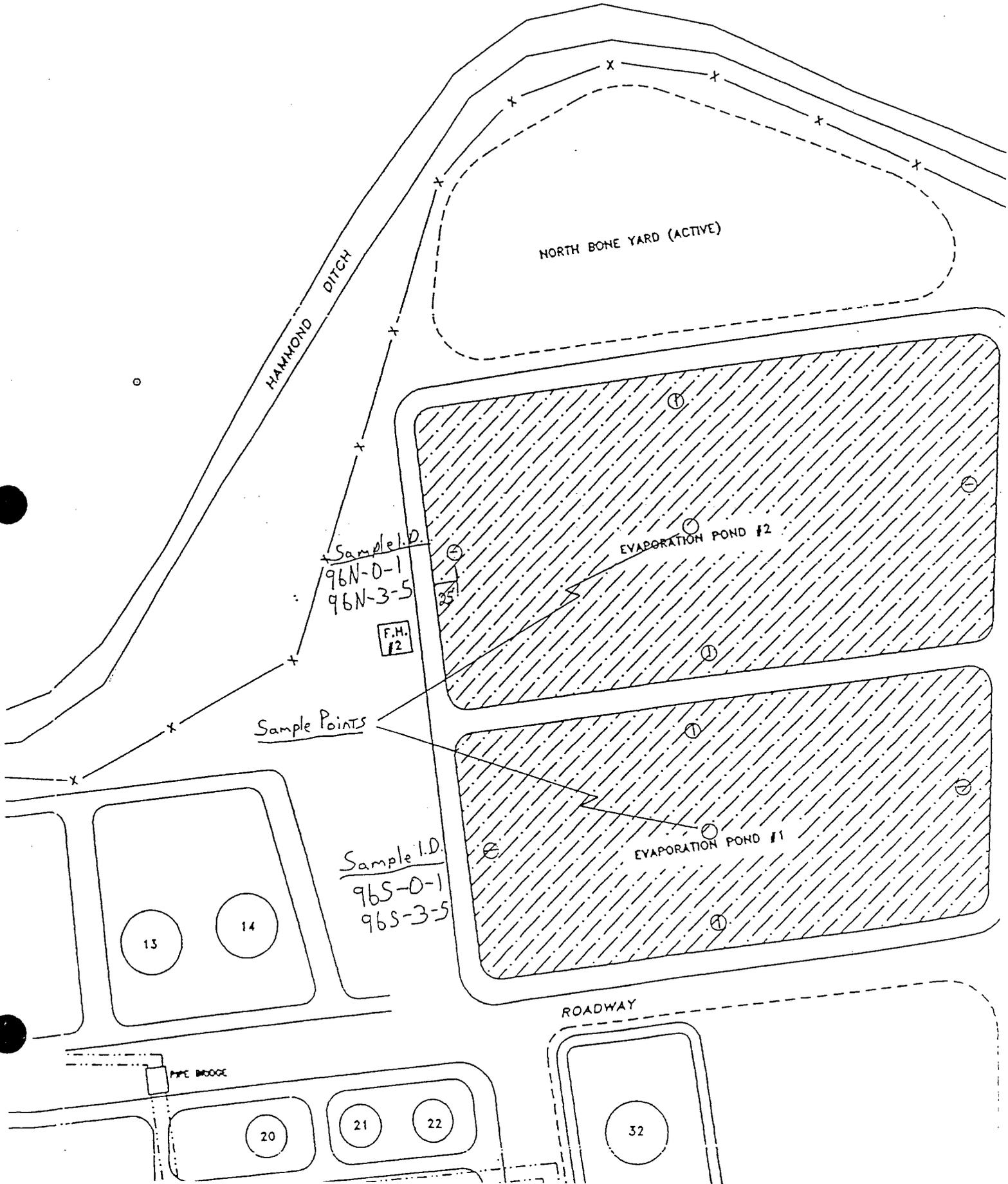
WQCC CONSTITUENT LIST

1996 OCD SAMPLING EVENT

JULY 10, 1996

Parameter	WQCC Standard (mg/l)	Lab Reporting Limit (mg/kg)
Arsenic	0.1	0.25
Barium	1.0	1.0
Cadmium	0.01	0.05
Chromium	0.05	0.5
Cyanide	0.2	0.2
Flouride	1.6	1.6
Lead	0.05	0.25
Total Mercury	0.002	0.2
Nitrate (NO3 as N)	10.0	10.0
Selenium	0.05	0.25
Silver	0.05	0.5
Uranium	5.0	10.0
Benzene	0.01	0.2
Toluene	0.75	0.2
Carbon Tetrachloride	0.01	0.2
1,2-Dichloroethane	0.01	0.2
1,1-Dichloroethylene	0.005	0.2
1,1,2,2-Tetrachloroethylene	0.02	0.2
1,1,2-Trichloroethylene	0.1	0.2
Ethylbenzene	0.75	0.2
Total Xylenes	0.62	0.2
Methylene Chloride	0.1	0.2
Chloroform	0.1	0.2
1,1-Dichloroethane	0.025	0.2
Ethylene Dibromide	0.0001	0.2
1,1,1-Trichloroethane	0.06	0.2
1,1,2-Trichlorethane	0.01	0.2
1,1,2,2-Tetrachloroethane	0.01	0.2
Vinyl Chloride	0.001	0.2
PAHs: total Naphthalene plus monomethylnaphthalenes	0.03	0.6
Benzo(a)pyrene	0.0007	0.5
Chloride	250	250
Copper	1.0	1.0
Iron	1.0	1.25
Manganese	0.2	0.5
Phenols	0.005	1.0
Sulfate (SO4)	600	600
Zinc	10	10.0
pH	6 to 9	6 to 9
Aluminum	5.0	5.0
Boron	0.75	2.5
Cobalt	0.05	0.5
Molybdenum	1.0	1.0
Nickel	0.2	0.5

ATTACHMENT B



Serial No. SS- _____

Title Evaporation Spray Area + Backgrou:

Project Name Giant Soil Sampling

Project No. 16633

Project Manager C.M. Chance

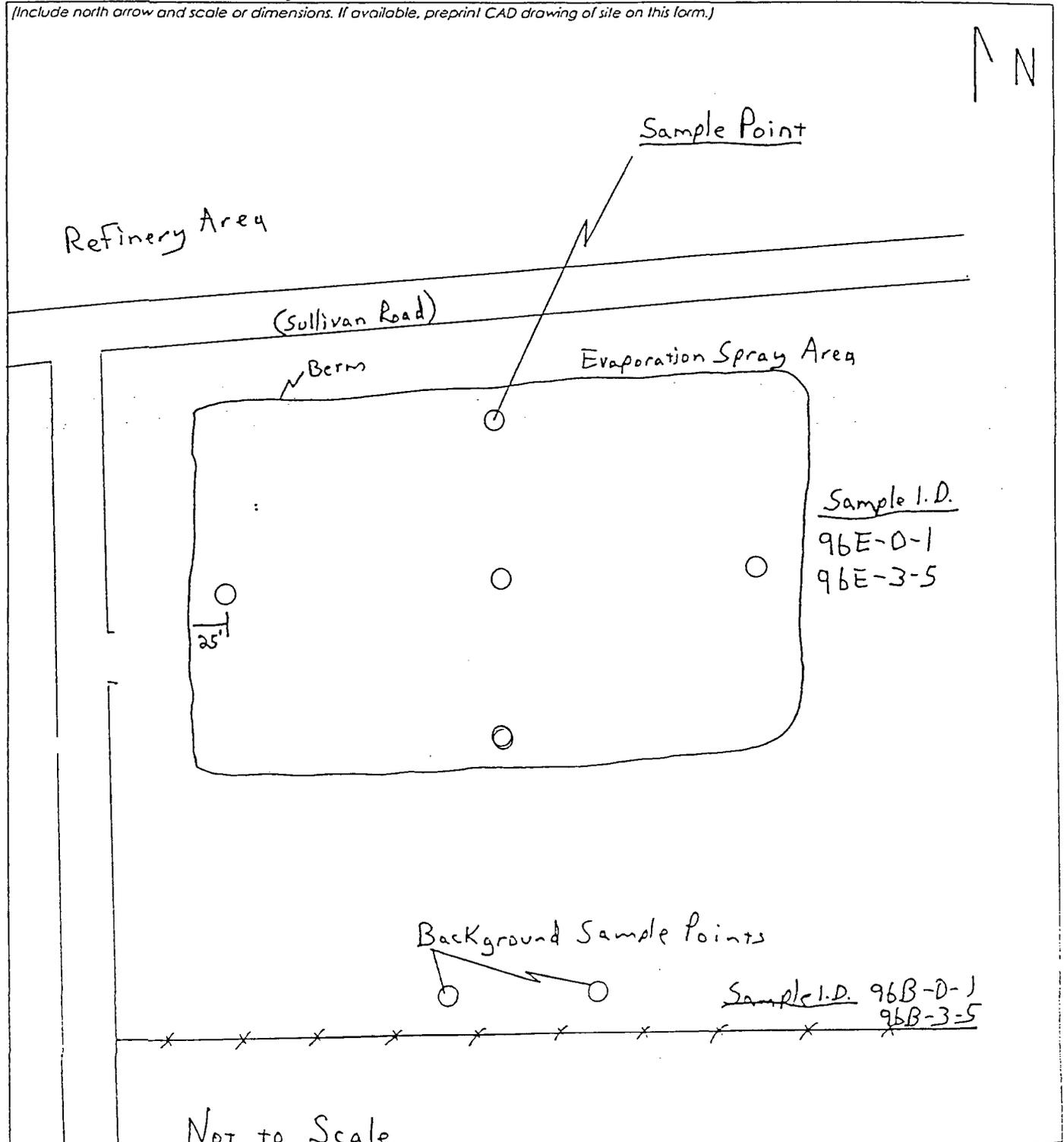
Phase/Task No. 1DDD.77

Client Company Giant Refining Co.

Site Name Bloomfield Refinery

Site Address Bloomfield, NM

(Include north arrow and scale or dimensions. If available, preprint CAD drawing of site on this form.)



Not to Scale

Created by: _____

Date 7/11/96

ATTACHMENT C

ATTACHMENT C

TABULATED ANALYTICAL DATA FOR CLOSURE ACTIVITIES						
GIANT REFINING COMPANY - BLOOMFIELD						
JULY, 1996						
NORTH UNLINED LAGOON						
		0-1 Foot	3-5 Feet	WQCC	Laboratory	
Parameter	Units	Result	Result	Standard	Limit	
Aluminum	mg/kg	6,144.00	6,020.00	5.00	5.00	
Arsenic	mg/kg	<0.50	<0.50	0.10	0.25	
Barium	mg/kg	99.40	93.20	1.00	1.00	
Boron	mg/kg	49.50	47.30	0.75	2.50	
Cadmium	mg/kg	<0.10	<0.10	0.01	0.05	
Chromium	mg/kg	8.00	5.80	0.05	0.50	
Cobalt	mg/kg	3.38	3.01	0.05	0.50	
Copper	mg/kg	6.09	4.68	1.00	1.00	
Iron	mg/kg	7,722.00	8,416.00	1.00	1.25	
Lead	mg/kg	7.22	6.80	0.05	0.25	
Manganese	mg/kg	140.00	173.00	0.20	0.50	
Mercury	mg/kg	<0.10	<0.10	0.002	0.20	
Molybdenum	mg/kg	<1.00	<1.00	1.00	1.00	
Nickel	mg/kg	5.64	5.46	0.20	0.50	
Selenium	mg/kg	<0.50	<0.50	0.05	0.25	
Silver	mg/kg	<1.00	<1.00	0.05	0.50	
Uranium	mg/kg	54.90	60.40	5.00	10.00	
Zinc	mg/kg	30.30	23.30	10.00	10.00	
Lab pH	s u.	6.90	8.00	6 to 9	6 to 9	
Fluoride	ppm	0.53	1.25	1.60	1.60	
Chloride	ppm	3783.00	998.00	250.00	250.00	
Sulfate	ppm	3638.00	370.00	600.00	600.00	
Cyanide	mg/Kg	<0.10	<0.10	0.20	0.20	
Nitrate as Nitrogen	ppm	0.46	0.05	10.00	10.00	
Benzene	mg/kg	ND	ND	0.01	0.20	
Toluene	mg/kg	ND	ND	0.75	0.20	
Carbon Tetrachloride	mg/kg	ND	ND	0.01	0.20	
1,2-Dichloroethane	mg/kg	ND	ND	0.01	0.20	
1,1-Dichloroethylene	mg/kg	ND	ND	0.0005	0.20	
1,1,2,2-Tetrachloroethylene	mg/kg	ND	ND	0.02	0.20	
1,1,2-Trichloroethylene	mg/kg	ND	ND	0.1	0.20	
Ethylbenzene	mg/kg	ND	ND	0.75	0.20	
Total Xylenes	mg/kg	ND	ND	0.62	0.20	
Methylene Chloride	mg/kg	ND	ND	0.1	0.20	
Chloroform	mg/kg	ND	ND	0.1	0.20	
1,1-Dichloroethane	mg/kg	ND	ND	0.025	0.20	
Ethylene Dibromide	mg/kg	ND	ND	0.0001	0.20	
1,1,1-Trichloroethane	mg/kg	ND	ND	0.06	0.20	
1,1,2-Trichloroethane	mg/kg	ND	ND	0.01	0.20	
1,1,2,2-Tetrachloroethane	mg/kg	ND	ND	0.01	0.20	
Vinyl Chloride	mg/kg	ND	ND	0.01	0.20	
PAHs: total Naphthalene plus	mg/kg					
monomethylnaphthalenes	mg/kg	ND	ND	0.03	0.50	
Benzo(a)pyrene	mg/kg	ND	ND	0.0007	0.50	

TABULATED ANALYTICAL DATA FOR CLOSURE ACTIVITIES

GIANT REFINING COMPANY - BLOOMFIELD

JULY, 1996

SOUTH UNLINED LAGOON

Parameter	Units	0-1 Foot	3-5 Feet	WQCC	Laboratory
		Result	Result	Standard	Limit
Aluminum	mg/kg	7,646.00	3,820.00	5.00	5.00
Arsenic	mg/kg	<0.50	<0.50	0.10	0.25
Barium	mg/kg	154.00	48.10	1.00	1.00
Boron	mg/kg	47.60	40.80	0.75	2.50
Cadmium	mg/kg	<0.10	<0.10	0.01	0.05
Chromium	mg/kg	30.90	4.20	0.05	0.50
Cobalt	mg/kg	3.99	1.78	0.05	0.50
Copper	mg/kg	10.70	3.46	1.00	1.00
Iron	mg/kg	10,486.00	5,068.00	1.00	1.25
Lead	mg/kg	7.72	4.93	0.05	0.25
Manganese	mg/kg	230.00	107.00	0.20	0.50
Mercury	mg/kg	<0.10	<0.10	0.002	0.20
Molybdenum	mg/kg	<1.00	<1.00	1.00	1.00
Nickel	mg/kg	8.34	3.04	0.20	0.50
Selenium	mg/kg	<0.50	<0.50	0.05	0.25
Silver	mg/kg	3.11	<1.00	0.05	0.50
Uranium	mg/kg	69.50	29.50	5.00	10.00
Zinc	mg/kg	52.30	15.70	10.00	10.00
Lab pH	s. u.	7.10	7.90	6 to 9	6 to 9
Fluoride	ppm	0.35	2.71	1.60	1.60
Chloride	ppm	2711.00	445.00	250.00	250.00
Sulfate	ppm	3193.00	469.00	600.00	600.00
Cyanide	mg/Kg	0.25	<0.10	0.20	0.20
Nitrate as Nitrogen	ppm	0.69	0.08	10.00	10.00
Benzene	mg/kg	ND	ND	0.01	0.20
Toluene	mg/kg	ND	ND	0.75	0.20
Carbon Tetrachloride	mg/kg	ND	ND	0.01	0.20
1,2-Dichloroethane	mg/kg	ND	ND	0.01	0.20
1,1-Dichloroethylene	mg/kg	ND	ND	0.0005	0.20
1,1,2,2-Tetrachloroethylene	mg/kg	ND	ND	0.02	0.20
1,1,2-Trichloroethylene	mg/kg	ND	ND	0.1	0.20
Ethylbenzene	mg/kg	ND	ND	0.75	0.20
Total Xylenes	mg/kg	ND	ND	0.62	0.20
Methylene Chloride	mg/kg	ND	ND	0.1	0.20
Chloroform	mg/kg	ND	ND	0.1	0.20
1,1-Dichloroethane	mg/kg	ND	ND	0.025	0.20
Ethylene Dibromide	mg/kg	ND	ND	0.0001	0.20
1,1,1-Trichloroethane	mg/kg	ND	ND	0.06	0.20
1,1,2-Trichloroethane	mg/kg	ND	ND	0.01	0.20
1,1,2,2-Tetrachloroethane	mg/kg	ND	ND	0.01	0.20
Vinyl Chloride	mg/kg	ND	ND	0.01	0.20
PAHs: total Naphthalene plus	mg/kg				
monomethylnaphthalenes	mg/kg	ND	ND	0.03	0.50
Benzo(a)pyrene	mg/kg	ND	ND	0.0007	0.50

TABULATED ANALYTICAL DATA FOR CLOSURE ACTIVITIES

GIANT REFINING COMPANY - BLOOMFIELD

JULY, 1996

SPRAY EVAPORATION AREA

Parameter	Units	0-1 Foot	3-5 Feet	WQCC	Laboratory
		Result	Result	Standard	Limit
Aluminum	mg/kg	10,122.00	7,102.00	5.00	5.00
Arsenic	mg/kg	1.16	0.53	0.10	0.25
Barium	mg/kg	195.00	189.00	1.00	1.00
Boron	mg/kg	55.80	56.90	0.75	2.50
Cadmium	mg/kg	0.16	<0.10	0.01	0.05
Chromium	mg/kg	9.48	7.48	0.05	0.50
Cobalt	mg/kg	5.06	4.11	0.05	0.50
Copper	mg/kg	3.58	2.32	1.00	1.00
Iron	mg/kg	13,097.00	10,569.00	1.00	1.25
Lead	mg/kg	11.60	7.69	0.05	0.25
Manganese	mg/kg	223.00	240.00	0.20	0.50
Mercury	mg/kg	<0.10	<0.10	0.002	0.20
Molybdenum	mg/kg	<1.00	1.05	1.00	1.00
Nickel	mg/kg	1.16	7.38	0.20	0.50
Selenium	mg/kg	<0.50	<0.50	0.05	0.25
Silver	mg/kg	<1.00	<1.00	0.05	0.50
Uranium	mg/kg	86.40	66.40	5.00	10.00
Zinc	mg/kg	45.30	30.60	10.00	10.00
Lab pH	s.u.	7.60	7.80	6 to 9	6 to 9
Fluoride	ppm	1.15	1.76	1.60	1.60
Chloride	ppm	2582.00	1235.00	250.00	250.00
Sulfate	ppm	2156.00	724.00	600.00	600.00
Cyanide	mg/Kg	<0.10	<0.10	0.20	0.20
Nitrate as Nitrogen	ppm	6.42	0.51	10.00	10.00
Benzene	mg/kg	ND	ND	0.01	0.20
Toluene	mg/kg	ND	ND	0.75	0.20
Carbon Tetrachloride	mg/kg	ND	ND	0.01	0.20
1,2-Dichloroethane	mg/kg	ND	ND	0.01	0.20
1,1-Dichloroethylene	mg/kg	ND	ND	0.0005	0.20
1,1,2,2-Tetrachloroethylene	mg/kg	ND	ND	0.02	0.20
1,1,2-Trichloroethylene	mg/kg	ND	ND	0.1	0.20
Ethylbenzene	mg/kg	ND	ND	0.75	0.20
Total Xylenes	mg/kg	ND	ND	0.62	0.20
Methylene Chloride	mg/kg	ND	ND	0.1	0.20
Chloroform	mg/kg	ND	ND	0.1	0.20
1,1-Dichloroethane	mg/kg	ND	ND	0.025	0.20
Ethylene Dibromide	mg/kg	ND	ND	0.0001	0.20
1,1,1-Trichloroethane	mg/kg	ND	ND	0.06	0.20
1,1,2-Trichloroethane	mg/kg	ND	ND	0.01	0.20
1,1,2,2-Tetrachloroethane	mg/kg	ND	ND	0.01	0.20
Vinyl Chloride	mg/kg	ND	ND	0.01	0.20
PAHs total Naphthalene plus	mg/kg				
monomethylnaphthalenes	mg/kg	ND	ND	0.03	0.60
Benz(a)pyrene	mg/kg	ND	ND	0.0007	0.50

TABULATED ANALYTICAL DATA FOR CLOSURE ACTIVITIES						
GIANT REFINING COMPANY - BLOOMFIELD						
JULY, 1996						
BACKGROUND SAMPLE						
		0-1 Foot	3-5 Feet	WQCC	Laboratory	
Parameter	Units	Result	Result	Standard	Limit	
Aluminum	mg/kg	6,199.00	3,266.00	5.00	5.00	
Arsenic	mg/kg	<0.50	<0.50	0.10	0.25	
Barium	mg/kg	166.00	56.00	1.00	1.00	
Boron	mg/kg	55.00	51.90	0.75	2.50	
Cadmium	mg/kg	0.10	<0.10	0.01	0.05	
Chromium	mg/kg	6.85	3.16	0.05	0.50	
Cobalt	mg/kg	3.84	1.83	0.05	0.50	
Copper	mg/kg	2.18	3.87	1.00	1.00	
Iron	mg/kg	9,401.00	4,751.00	1.00	1.25	
Lead	mg/kg	8.00	4.99	0.05	0.25	
Manganese	mg/kg	205.00	113.00	0.20	0.50	
Mercury	mg/kg	<0.10	<0.10	0.002	0.20	
Molybdenum	mg/kg	<1.00	<1.00	1.00	1.00	
Nickel	mg/kg	7.27	3.46	0.20	0.50	
Selenium	mg/kg	<0.50	<0.50	0.05	0.25	
Silver	mg/kg	<1.00	<1.00	0.05	0.50	
Uranium	mg/kg	84.10	31.10	5.00	10.00	
Zinc	mg/kg	33.20		10.00	10.00	
Lab pH	s.u.	7.50	8.20	6 to 9	6 to 9	
Fluoride	ppm	0.77	0.38	1.60	1.60	
Chloride	ppm	1054.00	324.00	250.00	250.00	
Sulfate	ppm	2790.00	395.00	600.00	600.00	
Cyanide	mg/Kg	<0.10	<0.10	0.20	0.20	
Nitrate as Nitrogen	ppm	14.20	<0.05	10.00	10.00	
Benzene	mg/kg	ND	ND	0.01	0.20	
Toluene	mg/kg	ND	ND	0.75	0.20	
Carbon Tetrachloride	mg/kg	ND	ND	0.01	0.20	
1,2-Dichloroethane	mg/kg	ND	ND	0.01	0.20	
1,1-Dichloroethylene	mg/kg	ND	ND	0.0005	0.20	
1,1,2,2-Tetrachloroethylene	mg/kg	ND	ND	0.02	0.20	
1,1,2-Trichloroethylene	mg/kg	ND	ND	0.1	0.20	
Ethylbenzene	mg/kg	ND	ND	0.75	0.20	
Total Xylenes	mg/kg	ND	ND	0.62	0.20	
Methylene Chloride	mg/kg	ND	ND	0.1	0.20	
Chloroform	mg/kg	ND	ND	0.1	0.20	
1,1-Dichloroethane	mg/kg	ND	ND	0.025	0.20	
Ethylene Dibromide	mg/kg	ND	ND	0.0001	0.20	
1,1,1-Trichloroethane	mg/kg	ND	ND	0.06	0.20	
1,1,2-Trichloroethane	mg/kg	ND	ND	0.01	0.20	
1,1,2,2-Tetrachloroethane	mg/kg	ND	ND	0.01	0.20	
Vinyl Chloride	mg/kg	ND	ND	0.01	0.20	
PAHs: total Naphthalene plus	mg/kg					
monomethylnaphthalenes	mg/kg	ND	ND	0.03	0.60	
Benzo(a)pyrene	mg/kg	ND	ND	0.0007	0.50	



2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

5 August 1996

Lynn Shelton
Giant Refining Co.
P. O. Box 159
Bloomfield, NM 87413

Mr. Shelton:

Enclosed please find the report for the samples received by our laboratory for analysis on July 10, 1996.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

Sincerely,

Anna Schaerer
Organic Analyst/IML-Farmington

Enclosure

xc: File

Client: **Giant Refining Co.**
 Project: **Bloomfield**
 Sample ID: **96S-0-1**
 Laboratory ID: **0396G01318**
 Sample Matrix: **Soil**
 Condition: **Cool/Intact**

Date Reported: **08/05/96**
 Date Sampled: **07/10/96**
 Time Sampled: **1:30 PM**
 Date Received: **07/10/96**

Parameter	Analytical Result	Units
-----------	-------------------	-------

Lab pH.....	7.1 -	s.u.
Fluoride.....	0.35 -	ppm
Chloride.....	2,711 -	ppm
Sulfate.....	3,193 -	ppm
Cyanide.....	0.25 -	mg/Kg
Nitrate as Nitrogen.....	0.69 -	ppm

Trace Metals (Total)

Aluminum.....	7,646 -	mg/Kg
Arsenic.....	<0.5 -	mg/Kg
Barium.....	154 -	mg/Kg
Boron.....	47.6 -	mg/Kg
Cadmium.....	<0.10 -	mg/Kg
Chromium.....	30.9 -	mg/Kg
Cobalt.....	3.99 -	mg/Kg
Copper.....	10.7 -	mg/Kg
Iron.....	10,486 -	mg/Kg
Lead.....	7.72 -	mg/Kg
Manganese.....	230 -	mg/Kg
Mercury.....	<0.10 -	mg/Kg
Molybdenum.....	<1.00 -	mg/Kg
Nickel.....	8.34 -	mg/Kg
Selenium.....	<0.50 -	mg/Kg
Silver.....	3.11 -	mg/Kg
Uranium.....	69.5 -	mg/Kg
Zinc.....	52.3 -	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
 SW-846, United States Environmental Protection Agency, November, 1986.
 "Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by *df*

Reviewed by *GB*

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/10/96
Sample ID:	96S-3-5	Time Sampled:	2:30 PM
Laboratory ID:	0396G01319	Date Received:	07/10/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
Lab pH.....	7.9	s.u.
Fluoride.....	2.71	ppm
Chloride.....	445	ppm
Sulfate.....	469	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	0.08	ppm
Trace Metals (Total)		
Aluminum.....	3,820	mg/Kg
Arsenic.....	<0.50	mg/Kg
Barium.....	48.1	mg/Kg
Boron.....	40.8	mg/Kg
Cadmium.....	<0.10	mg/Kg
Chromium.....	4.20	mg/Kg
Cobalt.....	1.78	mg/Kg
Copper.....	3.46	mg/Kg
Iron.....	5,068	mg/Kg
Lead.....	4.93	mg/Kg
Manganese.....	107	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.0	mg/Kg
Nickel.....	3.04	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.0	mg/Kg
Uranium.....	29.5	mg/Kg
Zinc.....	15.7	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by *AK*

Reviewed by *SB*

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/10/96
Sample ID:	96N-0-1	Time Sampled:	10:11 AM
Laboratory ID:	0396G01320	Date Received:	07/10/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
Lab pH.....	6.9	s.u.
Fluoride.....	0.53	ppm
Chloride.....	3,783	ppm
Sulfate.....	3,638	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	0.46	ppm
Trace Metals (Total)		
Aluminum.....	6,144	mg/Kg
Arsenic.....	<0.50	mg/Kg
Barium.....	99.4	mg/Kg
Boron.....	49.5	mg/Kg
Cadmium.....	<0.10	mg/Kg
Chromium.....	8.00	mg/Kg
Cobalt.....	3.38	mg/Kg
Copper.....	6.09	mg/Kg
Iron.....	7,722	mg/Kg
Lead.....	7.22	mg/Kg
Manganese.....	140	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.00	mg/Kg
Nickel.....	5.64	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.0	mg/Kg
Uranium.....	54.9	mg/Kg
Zinc.....	30.3	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by *AS*

Reviewed by *JB*

Client: **Giant Refining Co.**
 Project: **Bloomfield**
 Sample ID: **96N-3-5**
 Laboratory ID: **0396G01321**
 Sample Matrix: **Soil**
 Condition: **Cool/Intact**

Date Reported: **08/05/96**
 Date Sampled: **07/10/96**
 Time Sampled: **11:30 AM**
 Date Received: **07/10/96**

Parameter	Analytical Result	Units
Lab pH.....	8.0	s.u.
Fluoride.....	1.25	ppm
Chloride.....	998	ppm
Sulfate.....	370	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	0.05	ppm
Trace Metals (Total)		
Aluminum.....	6,020	mg/Kg
Arsenic.....	<0.50	mg/Kg
Barium.....	93.2	mg/Kg
Boron.....	47.3	mg/Kg
Cadmium.....	<0.10	mg/Kg
Chromium.....	5.80	mg/Kg
Cobalt.....	3.01	mg/Kg
Copper.....	4.68	mg/Kg
Iron.....	8,416	mg/Kg
Lead.....	6.80	mg/Kg
Manganese.....	173	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.0	mg/Kg
Nickel.....	5.46	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.0	mg/Kg
Uranium.....	60.4	mg/Kg
Zinc.....	23.3	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
 SW-846, United States Environmental Protection Agency, November, 1986.
 "Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by

SK

Reviewed by

SB

Quality Control / Quality Assurance

Known Analysis

Total Metals

Client: Giant Refining
Project: Bloomfield
Lab ID: 0396G01318-22
Matrix: Soil
Condition: Cool / Intact

Date Reported: 08/05/96
Date Sampled: 07/10/96
Date Received: 07/10/96

Known Analysis

Parameter	Found Result	Known Result	Units	Percent Recovery
Aluminum	0.94	1.00	mg/L	94%
Arsenic	0.009	0.010	mg/L	90%
Barium	0.91	1.00	mg/L	91%
Boron	0.95	1.00	mg/L	95%
Cadmium	0.004	0.004	mg/L	100%
Chromium	1.02	1.00	mg/L	102%
Cobalt	0.91	1.00	mg/L	91%
Copper	0.005	0.005	mg/L	100%
Iron	0.96	1.00	mg/L	96%
Lead	0.040	0.040	mg/L	100%
Manganese	1.01	1.00	mg/L	101%
Mercury	0.440	0.400	mg/L	110%
Molybdenum	1.01	1.00	mg/L	101%
Nickel	1.01	1.00	mg/L	101%
Selenium	0.010	0.010	mg/L	100%
Silver	0.004	0.004	mg/L	98%
Uranium	1.19	1.00	mg/L	119%
Zinc	1.01	1.00	mg/L	101%

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846. United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

AK

Reviewed By: *JB*

Quality Control / Quality Assurance

Spike Analysis Total Metals

Client: Giant Refining
Project: Bloomfield
Lab ID: 0396G01318-22
Matrix: Soil
Condition: Cool / Intact

Date Reported: 08/05/96
Date Sampled: 07/10/96
Date Received: 07/10/96

Spike Analysis

Parameter	Spiked Sample Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Aluminum	9.14	<0.05	10.0	91%
Arsenic	0.029	0.001	0.030	93%
Barium	1.26	0.88	0.50	92%
Boron	0.89	0.44	0.50	99%
Cadmium	0.002	<0.001	0.002	108%
Chromium	0.58	0.07	0.50	103%
Cobalt	0.47	0.03	0.50	89%
Copper	0.007	0.002	0.005	106%
Iron	9.28	<0.025	10.00	93%
Lead	0.032	0.010	0.025	106%
Manganese	1.63	1.24	0.50	98%
Mercury	0.55	<0.10	0.50	98%
Molybdenum	0.53	<0.10	0.50	105%
Nickel	0.56	0.05	0.50	103%
Selenium	0.024	0.001	0.025	92%
Silver	0.003	<0.001	0.003	108%
Uranium	0.95	0.49	0.50	102%
Zinc	0.79	0.27	0.50	109%

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Prepared By: *dk*

Reviewed By: *GR*

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY

Sample ID: 96 S-0-1

Project ID: Bloomfield, NM

Lab ID: B965796

0396G01318

Matrix: Soil

Date Reported: 07/30/96

Date Sampled: 07/10/96

Date Received: 07/12/96

Date Extracted: 07/16/96

Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane -	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane -	ND	1.0	mg/kg
1,1,2-Trichloroethane -	ND	1.0	mg/kg
1,1-Dichloroethane -	ND	1.0	mg/kg
1,1-Dichloroethene >	ND	1.0	mg/kg
1,2-Dichloroethane -	ND	1.0	mg/kg
1,2-Dichloropropane x	ND	1.0	mg/kg
2-Butanone (MEK) x	ND	5.0	mg/kg
2-Hexanone x	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK) x	ND	1.0	mg/kg
Acetone x	ND	5.0	mg/kg
Benzene -	ND	1.0	mg/kg
Bromodichloromethane >	ND	1.0	mg/kg
Bromoform >	ND	1.0	mg/kg
Bromomethane <	ND	1.0	mg/kg
Carbon Disulfide x	ND	1.0	mg/kg
Carbon Tetrachloride -	ND	1.0	mg/kg
Chlorobenzene x	ND	1.0	mg/kg
Chloroethane x	ND	1.0	mg/kg
Chloroform -	ND	1.0	mg/kg
Chloromethane :	ND	1.0	mg/kg
cis-1,3-Dichloropropene -	ND	1.0	mg/kg
Dibromochloromethane :	ND	1.0	mg/kg
Ethylbenzene -	ND	1.0	mg/kg
m,p-Xylene -	ND	1.0	mg/kg
Methylene chloride -	ND	5.0	mg/kg
o-Xylene -	ND	1.0	mg/kg
Styrene :	ND	1.0	mg/kg
Tetrachloroethene (PCE) :	ND	1.0	mg/kg
Toluene -	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
 Sample ID: 96 S-0-1
 Project ID: Bloomfield, NM
 Lab ID: B965796 0396G01318
 Matrix: Soil

Date Reported: 07/30/96
 Date Sampled: 07/10/96
 Date Received: 07/12/96
 Date Extracted: 07/16/96
 Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery % QC Limits

1,2-Dichloroethane-d4	94	70 - 121
Bromofluorobenzene	107	74 - 121
Toluene-d8	109	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

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EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client: GIANT REFINING COMPANY
Sample ID: 96 S-0-1
Project ID: Bloomfield, NM
Lab ID: B965796 0396G01318
Matrix: Soil

Date Reported: 07/25/96
Date Sampled: 07/10/96
Date Received: 07/12/96
Date Extracted: 07/17/96
Date Analyzed: 07/22/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	5.0	mg/kg
1,2-Dichlorobenzene	ND	5.0	mg/kg
1,3-Dichlorobenzene	ND	5.0	mg/kg
1,4-Dichlorobenzene	ND	5.0	mg/kg
2,4,5-Trichlorophenol	ND	10	mg/kg
2,4,6-Trichlorophenol	ND	10	mg/kg
2,4-Dichlorophenol	ND	5.0	mg/kg
2,4-Dimethylphenol	ND	5.0	mg/kg
2,4-Dinitrophenol	ND	10	mg/kg
2,4-Dinitrotoluene	ND	5.0	mg/kg
2,6-Dinitrotoluene	ND	5.0	mg/kg
2-Chloronaphthalene	ND	5.0	mg/kg
2-Chlorophenol	ND	5.0	mg/kg
2-Methylnaphthalene	ND	5.0	mg/kg
2-Methylphenol	ND	5.0	mg/kg
2-Nitroaniline	ND	25	mg/kg
2-Nitrophenol	ND	5.0	mg/kg
3,3'-Dichlorobenzidine	ND	10	mg/kg
3-Methylphenol/4-Methylphenol	ND	5.0	mg/kg
3-Nitroaniline	ND	25	mg/kg
4,6-Dinitro-2-methylphenol	ND	25	mg/kg
4-Bromophenyl-phenylether	ND	5.0	mg/kg
4-Chloro-3-methylphenol	ND	10	mg/kg
4-Chloroaniline	ND	10	mg/kg
4-Chlorophenyl-phenylether	ND	5.0	mg/kg
4-Nitroaniline	ND	10	mg/kg
4-Nitrophenol	ND	10	mg/kg
Acenaphthene	ND	5.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client: GIANT REFINING COMPANY
Sample ID: 96 S-0-1
Project ID: Bloomfield, NM
Lab ID: B965796 0396G01318
Matrix: Soil

Date Reported: 07/25/96
Date Sampled: 07/10/96
Date Received: 07/12/96
Date Extracted: 07/17/96
Date Analyzed: 07/22/96

Parameter	Result	PQL	Units
<i>Continued</i>			
Acenaphthylene	ND	5.0	mg/kg
Anthracene	ND	5.0	mg/kg
Benzo(a)anthracene	ND	5.0	mg/kg
Benzo(a)pyrene	ND	5.0	mg/kg
Benzo(b)fluoranthene	ND	5.0	mg/kg
Benzo(g,h,i)perylene	ND	5.0	mg/kg
Benzo(k)fluoranthene	ND	5.0	mg/kg
Benzoic Acid	ND	25	mg/kg
Benzyl Alcohol	ND	10	mg/kg
bis(2-Chloroethoxy)methane	ND	5.0	mg/kg
bis(2-Chloroethyl)ether	ND	5.0	mg/kg
bis(2-Chloroisopropyl)ether	ND	5.0	mg/kg
bis(2-Ethylhexyl)phthalate	ND	25	mg/kg
Butylbenzylphthalate	ND	5.0	mg/kg
Chrysene	ND	5.0	mg/kg
Di-n-Butylphthalate	ND	25	mg/kg
Di-n-Octylphthalate	ND	25	mg/kg
Dibenz(a,h)anthracene	ND	5.0	mg/kg
Dibenzofuran	ND	5.0	mg/kg
Diethylphthalate	ND	5.0	mg/kg
Dimethylphthalate	ND	5.0	mg/kg
Fluoranthene	ND	5.0	mg/kg
Fluorene	ND	5.0	mg/kg
Hexachlorobenzene	ND	10	mg/kg
Hexachlorobutadiene	ND	10	mg/kg
Hexachlorocyclopentadiene	ND	5.0	mg/kg
Hexachloroethane	ND	10	mg/kg
Indeno(1,2,3-cd)pyrene	ND	5.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client:	GIANT REFINING COMPANY	Date Reported:	07/25/96
Sample ID:	96 S-0-1	Date Sampled:	07/10/96
Project ID:	Bloomfield, NM	Date Received:	07/12/96
Lab ID:	B965796	Date Extracted:	07/17/96
Matrix:	Soil	Date Analyzed:	07/22/96
	0396G01318		

Parameter	Result	PQL	Units
Continued			
Isophorone	ND	5.0	mg/kg
N-Nitrosodi-n-propylamine	ND	5.0	mg/kg
N-Nitrosodiphenylamine	ND	5.0	mg/kg
Naphthalene	ND	5.0	mg/kg
Nitrobenzene	ND	5.0	mg/kg
Pentachlorophenol	ND	25	mg/kg
Phenanthrene	ND	5.0	mg/kg
Phenol	ND	5.0	mg/kg
Pyrene	ND	5.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	52	19 - 122
2-Fluorobiphenyl	65	30 - 115
2-Fluorophenol	46	25 - 121
Nitrobenzene-d5	53	23 - 120
Phenol-d6	51	24 - 113
Terphenyl-d14	47	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst

RR

Reviewed

118

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
 Sample ID: 96 S-3-5
 Project ID: Bloomfield, NM
 Lab ID: B965797 0396G01319
 Matrix: Soil

Date Reported: 07/30/96
 Date Sampled: 07/10/96
 Date Received: 07/12/96
 Date Extracted: 07/16/96
 Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client:	GIANT REFINING COMPANY	Date Reported:	07/30/96
Sample ID:	96 S-3-5	Date Sampled:	07/10/96
Project ID:	Bloomfield, NM	Date Received:	07/12/96
Lab ID:	B965797	Date Extracted:	07/16/96
Matrix:	Soil	Date Analyzed:	07/18/96
	0396G01319		

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	90	70 - 121
Bromofluorobenzene	100	74 - 121
Toluene-d8	102	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 7/31/96

19

**EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES**

Client: GIANT REFINING COMPANY

Sample ID: 96 S-3-5

Project ID: Bloomfield, NM

Lab ID: B965797

Matrix: Soil

0396G01319

Date Reported: 07/25/96

Date Sampled: 07/10/96

Date Received: 07/12/96

Date Extracted: 07/17/96

Date Analyzed: 07/23/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	1.0	mg/kg
1,2-Dichlorobenzene	ND	1.0	mg/kg
1,3-Dichlorobenzene	ND	1.0	mg/kg
1,4-Dichlorobenzene	ND	1.0	mg/kg
2,4,5-Trichlorophenol	ND	2.0	mg/kg
2,4,6-Trichlorophenol	ND	2.0	mg/kg
2,4-Dichlorophenol	ND	1.0	mg/kg
2,4-Dimethylphenol	ND	1.0	mg/kg
2,4-Dinitrophenol	ND	2.0	mg/kg
4-Dinitrotoluene	ND	1.0	mg/kg
4,6-Dinitrotoluene	ND	1.0	mg/kg
2-Chloronaphthalene	ND	1.0	mg/kg
2-Chlorophenol	ND	1.0	mg/kg
2-Methylnaphthalene	ND	1.0	mg/kg
2-Methylphenol	ND	1.0	mg/kg
2-Nitroaniline	ND	5.0	mg/kg
2-Nitrophenol	ND	1.0	mg/kg
3,3'-Dichlorobenzidine	ND	2.0	mg/kg
3-Methylphenol/4-Methylphenol	ND	1.0	mg/kg
3-Nitroaniline	ND	5.0	mg/kg
4,6-Dinitro-2-methylphenol	ND	5.0	mg/kg
4-Bromophenyl-phenylether	ND	1.0	mg/kg
4-Chloro-3-methylphenol	ND	2.0	mg/kg
4-Chloroaniline	ND	2.0	mg/kg
4-Chlorophenyl-phenylether	ND	1.0	mg/kg
4-Nitroaniline	ND	2.0	mg/kg
4-Nitrophenol	ND	2.0	mg/kg
Acenaphthene	ND	1.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client: GIANT REFINING COMPANY
Sample ID: 96 S-3-5
Project ID: Bloomfield, NM
Lab ID: B965797 0396G01319
Matrix: Soil

Date Reported: 07/25/96
Date Sampled: 07/10/96
Date Received: 07/12/96
Date Extracted: 07/17/96
Date Analyzed: 07/23/96

Parameter	Result	PQL	Units
Continued			
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Benzoic Acid	ND	5.0	mg/kg
Benzyl Alcohol	ND	2.0	mg/kg
bis(2-Chloroethoxy)methane	ND	1.0	mg/kg
bis(2-Chloroethyl)ether	ND	1.0	mg/kg
bis(2-Chloroisopropyl)ether	ND	1.0	mg/kg
bis(2-Ethylhexyl)phthalate	ND	5.0	mg/kg
Butylbenzylphthalate	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Di-n-Butylphthalate	ND	5.0	mg/kg
Di-n-Octylphthalate	ND	5.0	mg/kg
Dibenz(a,h)anthracene	ND	1.0	mg/kg
Dibenzofuran	ND	1.0	mg/kg
Diethylphthalate	ND	1.0	mg/kg
Dimethylphthalate	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Hexachlorobenzene	ND	2.0	mg/kg
Hexachlorobutadiene	ND	2.0	mg/kg
Hexachlorocyclopentadiene	ND	1.0	mg/kg
Hexachloroethane	ND	2.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client:	GIANT REFINING COMPANY	Date Reported:	07/25/96
Sample ID:	96 S-3-5	Date Sampled:	07/10/96
Project ID:	Bloomfield, NM	Date Received:	07/12/96
Lab ID:	B965797	Date Extracted:	07/17/96
	0396G01319	Date Analyzed:	07/23/96
Matrix:	Soil		

Parameter	Result	PQL	Units
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Continued

Isophorone	ND	1.0	mg/kg
N-Nitrosodi-n-propylamine	ND	1.0	mg/kg
N-Nitrosodiphenylamine	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Nitrobenzene	ND	1.0	mg/kg
Pentachlorophenol	ND	5.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Phenol	ND	1.0	mg/kg
re	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	55	19 - 122
2-Fluorobiphenyl	62	30 - 115
2-Fluorophenol	58	25 - 121
Nitrobenzene-d5	63	23 - 120
Phenol-d6	64	24 - 113
Terphenyl-d14	47	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst

RRS

Reviewed

118

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
Sample ID: 96 N-0-1
Project ID: Bloomfield, NM
Lab ID: B965798 0396G01320
Matrix: Soil

Date Reported: 07/30/96
Date Sampled: 07/10/96
Date Received: 07/12/96
Date Extracted: 07/16/96
Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery % QC Limits

1,2-Dichloroethane-d4	92	70 - 121
Bromofluorobenzene	107	74 - 121
Toluene-d8	105	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.O. 7/31/96

1, 2

**EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES**

Client: GIANT REFINING COMPANY

Sample ID: 96 N-0-1

Project ID: Bloomfield, NM

Lab ID: B965798

0396G01320

Matrix: Soil

Date Reported: 07/25/96

Date Sampled: 07/10/96

Date Received: 07/12/96

Date Extracted: 07/17/96

Date Analyzed: 07/22/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	5.0	mg/kg
1,2-Dichlorobenzene	ND	5.0	mg/kg
1,3-Dichlorobenzene	ND	5.0	mg/kg
1,4-Dichlorobenzene	ND	5.0	mg/kg
2,4,5-Trichlorophenol	ND	10	mg/kg
2,4,6-Trichlorophenol	ND	10	mg/kg
2,4-Dichlorophenol	ND	5.0	mg/kg
2,4-Dimethylphenol	ND	5.0	mg/kg
2,4-Dinitrophenol	ND	10	mg/kg
1-Dinitrotoluene	ND	5.0	mg/kg
2,6-Dinitrotoluene	ND	5.0	mg/kg
2-Chloronaphthalene	ND	5.0	mg/kg
2-Chlorophenol	ND	5.0	mg/kg
2-Methylnaphthalene	ND	5.0	mg/kg
2-Methylphenol	ND	5.0	mg/kg
2-Nitroaniline	ND	25	mg/kg
2-Nitrophenol	ND	5.0	mg/kg
3,3'-Dichlorobenzidine	ND	10	mg/kg
3-Methylphenol/4-Methylphenol	ND	5.0	mg/kg
3-Nitroaniline	ND	25	mg/kg
4,6-Dinitro-2-methylphenol	ND	25	mg/kg
4-Bromophenyl-phenylether	ND	5.0	mg/kg
4-Chloro-3-methylphenol	ND	10	mg/kg
4-Chloroaniline	ND	10	mg/kg
4-Chlorophenyl-phenylether	ND	5.0	mg/kg
4-Nitroaniline	ND	10	mg/kg
4-Nitrophenol	ND	10	mg/kg
Acenaphthene	ND	5.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client:	GIANT REFINING COMPANY	Date Reported:	07/25/96
Sample ID:	96 N-0-1	Date Sampled:	07/10/96
Project ID:	Bloomfield, NM	Date Received:	07/12/96
Lab ID:	B965798	Date Extracted:	07/17/96
Matrix:	Soil	Date Analyzed:	07/22/96
	0396G01320		

Parameter	Result	PQL	Units
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Continued

Isophorone	ND	5.0	mg/kg
N-Nitrosodi-n-propylamine	ND	5.0	mg/kg
N-Nitrosodiphenylamine	ND	5.0	mg/kg
Naphthalene	ND	5.0	mg/kg
Nitrobenzene	ND	5.0	mg/kg
Pentachlorophenol	ND	25	mg/kg
Phenanthrene	ND	5.0	mg/kg
Phenol	ND	5.0	mg/kg
Pyrene	ND	5.0	mg/kg

JALITY CONTROL - Surrogate Recovery	%	QC Limits
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2,4,6-Tribromophenol	49	19 - 122
2-Fluorobiphenyl	58	30 - 115
2-Fluorophenol	44	25 - 121
Nitrobenzene-d5	49	23 - 120
Phenol-d6	49	24 - 113
Terphenyl-d14	42	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst

RRD

Reviewed

US

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY

Sample ID: 96 N-3-5

Project ID: Bloomfield, NM

Lab ID: B965799

0396G01321

Matrix: Soil

Date Reported: 07/30/96

Date Sampled: 07/10/96

Date Received: 07/12/96

Date Extracted: 07/16/96

Date Analyzed: 07/17/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
Sample ID: 96 N-3-5
Project ID: Bloomfield, NM
Lab ID: B965799 0396G01321
Matrix: Soil

Date Reported: 07/30/96
Date Sampled: 07/10/96
Date Received: 07/12/96
Date Extracted: 07/16/96
Date Analyzed: 07/17/96

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery % QC Limits

1,2-Dichloroethane-d4	99	70 - 121
Bromofluorobenzene	110	74 - 121
luene-d8	111	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 7/31/96

Reviewed 1/18

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client: GIANT REFINING COMPANY

Sample ID: 96 N-3-5

Project ID: Bloomfield, NM

Lab ID: B965799

0396G01321

Matrix: Soil

Date Reported: 07/25/96

Date Sampled: 07/10/96

Date Received: 07/12/96

Date Extracted: 07/17/96

Date Analyzed: 07/23/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	1.0	mg/kg
1,2-Dichlorobenzene	ND	1.0	mg/kg
1,3-Dichlorobenzene	ND	1.0	mg/kg
1,4-Dichlorobenzene	ND	1.0	mg/kg
2,4,5-Trichlorophenol	ND	2.0	mg/kg
2,4,6-Trichlorophenol	ND	2.0	mg/kg
2,4-Dichlorophenol	ND	1.0	mg/kg
2,4-Dimethylphenol	ND	1.0	mg/kg
2,4-Dinitrophenol	ND	2.0	mg/kg
2,4-Dinitrotoluene	ND	1.0	mg/kg
1,3-Dinitrotoluene	ND	1.0	mg/kg
1-Chloronaphthalene	ND	1.0	mg/kg
2-Chlorophenol	ND	1.0	mg/kg
2-Methylnaphthalene	ND	1.0	mg/kg
2-Methylphenol	ND	1.0	mg/kg
2-Nitroaniline	ND	5.0	mg/kg
2-Nitrophenol	ND	1.0	mg/kg
3,3'-Dichlorobenzidine	ND	2.0	mg/kg
3-Methylphenol/4-Methylphenol	ND	1.0	mg/kg
3-Nitroaniline	ND	5.0	mg/kg
4,6-Dinitro-2-methylphenol	ND	5.0	mg/kg
4-Bromophenyl-phenylether	ND	1.0	mg/kg
4-Chloro-3-methylphenol	ND	2.0	mg/kg
4-Chloroaniline	ND	2.0	mg/kg
4-Chlorophenyl-phenylether	ND	1.0	mg/kg
4-Nitroaniline	ND	2.0	mg/kg
4-Nitrophenol	ND	2.0	mg/kg
Acenaphthene	ND	1.0	mg/kg

EPA METHOD 8270
HSL SEMI-VOLATILE COMPOUNDS
BASE/NEUTRAL/ACID EXTRACTABLES

Client:	GIANT REFINING COMPANY	Date Reported:	07/25/96
Sample ID:	96 N-3-5	Date Sampled:	07/10/96
Project ID:	Bloomfield, NM	Date Received:	07/12/96
Lab ID:	B965799	Date Extracted:	07/17/96
Matrix:	Soil	Date Analyzed:	07/23/96
	0396G01321		

Parameter	Result	PQL	Units
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Continued

Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Benzoic Acid	ND	5.0	mg/kg
Benzyl Alcohol	ND	2.0	mg/kg
bis(2-Chloroethoxy)methane	ND	1.0	mg/kg
(2-Chloroethyl)ether	ND	1.0	mg/kg
bis(2-Chloroisopropyl)ether	ND	1.0	mg/kg
bis(2-Ethylhexyl)phthalate	ND	5.0	mg/kg
Butylbenzylphthalate	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Di-n-Butylphthalate	ND	5.0	mg/kg
Di-n-Octylphthalate	ND	5.0	mg/kg
Dibenz(a,h)anthracene	ND	1.0	mg/kg
Dibenzofuran	ND	1.0	mg/kg
Diethylphthalate	ND	1.0	mg/kg
Dimethylphthalate	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Hexachlorobenzene	ND	2.0	mg/kg
Hexachlorobutadiene	ND	2.0	mg/kg
Hexachlorocyclopentadiene	ND	1.0	mg/kg
Hexachloroethane	ND	2.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg

QUALITY ASSURANCE / QUALITY CONTROL

LAB QA/QC
EPA METHOD 8240
INSTRUMENT BLANK

Date Analyzed: 07/18/96
Lab ID: IBS006200
Matrix:

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg
trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg
2-Hexanone	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8240
INSTRUMENT BLANK

Date Analyzed: 07/18/96
Lab ID: IBS006200
Matrix:

Parameter	Result	PQL	Units
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Continued

4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
Bromofluorobenzene	106	74 - 121
1,2-Dichloroethane-d4	89	70 - 121
Toluene-d8	107	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E.D. 7/31/96

Reviewed WS

LAB QA/QC
EPA METHOD 8240
INSTRUMENT BLANK

Date Analyzed: 07/17/96
Lab ID: IBS006199
Matrix:

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg
trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg
2-Hexanone	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8240
INSTRUMENT BLANK

Date Analyzed: 07/17/96
Lab ID: IBS006199
Matrix:

Parameter	Result	PQL	Units
Continued			
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
Bromofluorobenzene	111	74 - 121
1,2-Dichloroethane-d4	92	70 - 121
Toluene-d8	110	81 - 117

Analyst E.O. 7/31/96

Reviewed WJ

LAB QA/QC
EPA METHOD 8240
METHOD BLANK

Date Analyzed: 07/17/96
Lab ID: MBS006198
Matrix: Sand
Date Extracted: 07/16/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg
trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8240
METHOD BLANK

Date Analyzed: 07/17/96
Lab ID: MBS006198
Matrix: Sand
Date Extracted: 07/16/96

Parameter	Result	PQL	Units
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Continued

Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	95	70 - 121
Bromofluorobenzene	105	74 - 121
Toluene-d8	110	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E.O. 7/17/96

Reviewed WS

LAB QA/QC
EPA METHOD 8270
METHOD BLANKDate Analyzed: 07/20/96
Lab ID: MBS96199
Matrix: Soil
Date Extracted: 07/17/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	1.0	mg/kg
1,2-Dichlorobenzene	ND	1.0	mg/kg
1,3-Dichlorobenzene	ND	1.0	mg/kg
1,4-Dichlorobenzene	ND	1.0	mg/kg
2,4,5-Trichlorophenol	ND	2.0	mg/kg
2,4,6-Trichlorophenol	ND	2.0	mg/kg
2,4-Dichlorophenol	ND	1.0	mg/kg
2,4-Dimethylphenol	ND	1.0	mg/kg
2,4-Dinitrophenol	ND	2.0	mg/kg
2,4-Dinitrotoluene	ND	1.0	mg/kg
2,6-Dinitrotoluene	ND	1.0	mg/kg
2-Chloronaphthalene	ND	1.0	mg/kg
2-Chlorophenol	ND	1.0	mg/kg
2-Methylnaphthalene	ND	1.0	mg/kg
2-Methylphenol	ND	1.0	mg/kg
2-Nitroaniline	ND	5.0	mg/kg
2-Nitrophenol	ND	1.0	mg/kg
3,3'-Dichlorobenzidine	ND	2.0	mg/kg
3-Methylphenol/4-Methylphenol	ND	1.0	mg/kg
3-Nitroaniline	ND	5.0	mg/kg
4,6-Dinitro-2-methylphenol	ND	5.0	mg/kg
4-Bromophenyl-phenylether	ND	1.0	mg/kg
4-Chloro-3-methylphenol	ND	2.0	mg/kg
4-Chloroaniline	ND	2.0	mg/kg
4-Chlorophenyl-phenylether	ND	1.0	mg/kg
4-Nitroaniline	ND	2.0	mg/kg
4-Nitrophenol	ND	2.0	mg/kg
Acenaphthene	ND	1.0	mg/kg
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8270
METHOD BLANKDate Analyzed: 07/20/96
Lab ID: MBS96199
Matrix: Soil
Date Extracted: 07/17/96

Parameter	Result	PQL	Units
Continued			
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Benzoic Acid	ND	5.0	mg/kg
Benzyl Alcohol	ND	2.0	mg/kg
bis(2-Chloroethoxy)methane	ND	1.0	mg/kg
bis(2-Chloroethyl)ether	ND	1.0	mg/kg
bis(2-Chloroisopropyl)ether	ND	1.0	mg/kg
bis(2-Ethylhexyl)phthalate	ND	5.0	mg/kg
Butylbenzylphthalate	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Di-n-Butylphthalate	ND	5.0	mg/kg
Di-n-Octylphthalate	ND	5.0	mg/kg
Dibenz(a,h)anthracene	ND	1.0	mg/kg
Dibenzofuran	ND	1.0	mg/kg
Diethylphthalate	ND	1.0	mg/kg
Dimethylphthalate	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Hexachlorobenzene	ND	2.0	mg/kg
Hexachlorobutadiene	ND	2.0	mg/kg
Hexachlorocyclopentadiene	ND	1.0	mg/kg
Hexachloroethane	ND	2.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg
Isophorone	ND	1.0	mg/kg
N-Nitrosodi-n-propylamine	ND	1.0	mg/kg
N-Nitrosodiphenylamine	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Nitrobenzene	ND	1.0	mg/kg
Pentachlorophenol	ND	5.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Phenol	ND	1.0	mg/kg
Pyrene	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8270
METHOD BLANK

Date Analyzed: 07/20/96
Lab ID: MBS96199
Matrix: Soil
Date Extracted: 07/17/96

Parameter	Result	PQL	Units
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Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	56	19 - 122
2-Fluorobiphenyl	53	30 - 115
2-Fluorophenol	46	25 - 121
Nitrobenzene-d5	51	23 - 120
Phenol-d6	56	24 - 113
Terphenyl-d14	45	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst

RES

Reviewed

WJ

LAB QA/QC
EPA METHOD 8240
BLANK SPIKE / BLANK SPIKE DUPLICATE SUMMARY

Date Analyzed: 07/17/96
Lab ID: BSS60198
Matrix: Sand
Date Extracted: 07/16/96

Original Sample Parameters

Parameter	Spike Added (mg/kg)	Sample Result (mg/kg)	Spike Result (mg/kg)	BS Recovery %	QC Limits Rec.
1,1-Dichloroethene	10	0	8.44	84	59 -172
Benzene	10	0	9.77	98	62 -137
Chlorobenzene	10	0	10.7	107	66 -142
Toluene	10	0	10.8	108	59 -139
Trichloroethene (TCE)	10	0	10.3	103	60 -133

Duplicate Sample Parameters

Parameter	Spike Added (mg/kg)	BSD Result (mg/kg)	BSD Recovery %	RPD %	QC Limits RPD	QC Limits Rec.
1,1-Dichloroethene	10	10.2	102	19	22	59 -172
Benzene	10	10.1	101	3	24	62 -137
Chlorobenzene	10	10.8	108	1	21	66 -142
Toluene	10	10.8	108	0	21	59 -139
Trichloroethene (TCE)	10	10.5	105	2	21	60 -133

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 10 outside QC limits.
RPD: 0 out of 5 outside QC limits.

Analyst E.O. 7/31/96

Reviewed WJ

LAB QA/QC
EPA METHOD 8270
BLANK SPIKE / BLANK SPIKE DUPLICATE SUMMARY

Date Analyzed: 07/20/96
Lab ID: BSS96199
Matrix: Soil
Date Extracted: 07/17/96

Original Sample Parameters

Parameter	Spike Added (mg/kg)	Sample Result (mg/kg)	Spike Result (mg/kg)	BS Recovery %	QC Limits Rec.
1,2,4-Trichlorobenzene	10	0	4.0	40	38 - 107
1,4-Dichlorobenzene	10	0	4.2	42	28 - 104
2,4-Dinitrotoluene	10	0	6.8	68	28 - 89
2-Chlorophenol	20	0	8.3	42	25 - 102
4-Chloro-3-methylphenol	20	0	12	60	26 - 103
4-Nitrophenol	20	0	11	55	11 - 114
Acenaphthene	10	0	6.2	62	31 - 137
N-Nitrosodi-n-propylamine	10	0	8.0	80	41 - 126
Pentachlorophenol	20	0	13	65	17 - 109
Phenol	20	0	8.3	42	26 - 90
Pyrene	10	0	5.1	51	35 - 142

Duplicate Sample Parameters

Parameter	Spike Added (mg/kg)	BSD Result (mg/kg)	BSD Recovery %	RPD %	QC Limits RPD Rec.
1,2,4-Trichlorobenzene	10	5.8	58	37 *	23 38 - 107
1,4-Dichlorobenzene	10	5.9	59	34 *	27 28 - 104
2,4-Dinitrotoluene	10	7.0	70	3	47 28 - 89
2-Chlorophenol	20	12	60	36	50 25 - 102
4-Chloro-3-methylphenol	20	13	65	8	33 26 - 103
4-Nitrophenol	20	12	60	9	50 11 - 114
Acenaphthene	10	6.8	68	9	19 31 - 137
N-Nitrosodi-n-propylamine	10	8.5	85	6	38 41 - 126
Pentachlorophenol	20	14	70	7	47 17 - 109
Phenol	20	12	60	36 *	35 26 - 90
Pyrene	10	5.4	54	6	36 35 - 142

Note: Spike Recoveries are calculated using zero for Sample result if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 22 outside QC limits.
RPD: 3 out of 11 outside QC limits.

Analyst

RRJ

Reviewed

WJ

LAB QA/QC
EPA METHOD 8270
MATRIX SPIKE

Date Analyzed: 07/23/96
 Lab ID: 0596H05797 SK1 0396G01319
 Matrix: Soil
 Date Extracted: 07/17/96

Parameter	Spike Added (mg/kg)	Sample Result (mg/kg)	Spike Result (mg/kg)	MS Recovery %	QC Limits Rec.
1,2,4-Trichlorobenzene	10	0	5.4	54	38 -107
1,4-Dichlorobenzene	10	0	5.1	51	28 -104
2,4-Dinitrotoluene	10	0	6.4	64	28 - 89
2-Chlorophenol	20	0	12	60	25 -102
4-Chloro-3-methylphenol	20	0	13	65	26 -103
4-Nitrophenol	20	0	11	55	11 -114
Acenaphthene	10	0	6.5	65	31 -137
N-Nitrosodi-n-propylamine	10	0	8.5	85	41 -126
Pentachlorophenol	20	0	12	60	17 -109
Phenol	20	0	12	60	26 - 90
Pyrene	10	0	5.1	51	35 -142

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	59	19 -122
2-Fluorobiphenyl	66	30 -115
2-Fluorophenol	60	25 -121
Nitrobenzene-d5	68	23 -120
Phenol-d6	67	24 -113
Terphenyl-d14	44	18 -137

Note: Spike Recoveries are calculated using zero for Sample result if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 11 outside QC limits.

Analyst RAJ

Reviewed WJ

CHAIN OF CUSTODY RECORD

Client/Project Name: **GIANT REFINING CO - BLM FLD** Project Location: **LYNN SHELTON**

Sampler: (Signature) _____ Chain of Custody Tape No. _____

Sample No/ Identification	Date	Time	Lab Number	Matrix	No. of Containers	ANALYSES / PARAMETERS	Remarks
96 S-0-1	7/10/96	1330		SOIL	4		
96 S-3-5	7/10/96	1430			4		
96 N-0-1	7/10/96	1011			4		
96 N-3-5	7/10/96	1130			4		
Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____							
Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____							
Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____							

Inter-Mountain Laboratories, Inc.

- 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone 307) 672-8945
- 1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945
- 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737
- 1160 Research Dr. Bozeman, Montana 59715 Telephone (406) 586-9450
- 11183 SH 30 College Station, TX 77845 Telephone (409) 776-8945
- 3304 Longmire Drive College Station, TX 77845 Telephone (409) 774-4999

37672

SOIL + intact

WRCC LIST



2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

5 August 1996

Lynn Shelton
Giant Refining Co.
P. O. Box 159
Bloomfield, NM 87413

Mr. Shelton:

Enclosed please find the report for the samples received by our laboratory for analysis on July 11, 1996.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

Sincerely,

A handwritten signature in cursive script that reads 'Anna Schaerer'.

Anna Schaerer
Organic Analyst/IML-Farmington

Enclosure

xc: File

CASE NARRATIVE

Client: GIANT REFINING COMPANY
Project: Bloomfield, NM Received on: 07/16/96
Set ID: 0596H05846 # samples: 4

Suites: 8240 Standard, 8270 PAHs

Samples were received for analysis at Inter-Mountain Laboratories (IML), Bozeman, Montana. Enclosed are the results of these analyses.

Limits of detection for each instrument/analysis are determined by sample matrix effects, instrument performance under standard conditions, and dilution requirements to maintain chromatography output within calibration ranges. Quantitations have been calculated on an as received basis.



Jack Felkey
IML-Bozeman

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/11/96
Sample ID:	96E-0-1	Time Sampled:	9:45 AM
Laboratory ID:	0396G01328	Date Received:	07/11/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
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Lab pH.....	7.6	s.u.
Fluoride.....	1.15	ppm
Chloride.....	2,582	ppm
Sulfate.....	2,156	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	6.42	ppm

Trace Metals (Total)

Aluminum.....	10,122	mg/Kg
Arsenic.....	1.16	mg/Kg
Barium.....	195	mg/Kg
Boron.....	55.8	mg/Kg
Cadmium.....	0.158	mg/Kg
Chromium.....	9.48	mg/Kg
Cobalt.....	5.06	mg/Kg
Copper.....	3.58	mg/Kg
Iron.....	13,097	mg/Kg
Lead.....	11.6	mg/Kg
Manganese.....	223	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.00	mg/Kg
Nickel.....	1.16	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.00	mg/Kg
Uranium.....	86.4	mg/Kg
Zinc.....	45.3	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by *AS*

Reviewed by *JB*

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/11/96
Sample ID:	96E-3-5	Time Sampled:	10:45 AM
Laboratory ID:	0396G01329	Date Received:	07/11/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
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Lab pH.....	7.8	s.u.
Fluoride.....	1.76	ppm
Chloride.....	1,235	ppm
Sulfate.....	724	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	0.51	ppm

Trace Metals (Total)

Aluminum.....	7,102	mg/Kg
Arsenic.....	0.527	mg/Kg
Barium.....	189	mg/Kg
Boron.....	56.9	mg/Kg
Cadmium.....	<0.10	mg/Kg
Chromium.....	7.48	mg/Kg
Cobalt.....	4.11	mg/Kg
Copper.....	2.32	mg/Kg
Iron.....	10,569	mg/Kg
Lead.....	7.69	mg/Kg
Manganese.....	240	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	1.05	mg/Kg
Nickel.....	7.38	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.00	mg/Kg
Uranium.....	66.4	mg/Kg
Zinc.....	30.6	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by *df*

Reviewed by *AB*

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/11/96
Sample ID:	96B-0-1	Time Sampled:	11:45 AM
Laboratory ID:	0396G01330	Date Received:	07/11/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
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Lab pH.....	7.5	s.u.
Fluoride.....	0.77	ppm
Chloride.....	1,054	ppm
Sulfate.....	2,790	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	14.2	ppm

Trace Metals (Total)

Aluminum.....	6,199	mg/Kg
Arsenic.....	<0.50	mg/Kg
Barium.....	166	mg/Kg
Boron.....	55.0	mg/Kg
Cadmium.....	0.104	mg/Kg
Chromium.....	6.85	mg/Kg
Cobalt.....	3.84	mg/Kg
Copper.....	2.18	mg/Kg
Iron.....	9,401	mg/Kg
Lead.....	8.00	mg/Kg
Manganese.....	205	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.00	mg/Kg
Nickel.....	7.27	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.00	mg/Kg
Uranium.....	84.1	mg/Kg
Zinc.....	33.2	mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by AK

Reviewed by AB

Client:	Giant Refining Co.	Date Reported:	08/05/96
Project:	Bloomfield	Date Sampled:	07/11/96
Sample ID:	96B-3-5	Time Sampled:	12:30 PM
Laboratory ID:	0396G01331	Date Received:	07/11/96
Sample Matrix:	Soil		
Condition:	Cool/Intact		

Parameter	Analytical Result	Units
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Lab pH.....	8.2	s.u.
Fluoride.....	0.38	ppm
Chloride.....	324	ppm
Sulfate.....	395	ppm
Cyanide.....	<0.10	mg/Kg
Nitrate as Nitrogen.....	<0.05	ppm

Trace Metals (Total)

Aluminum.....	3,266	mg/Kg
Arsenic.....	<0.50	mg/Kg
Barium.....	56.0	mg/Kg
Boron.....	51.9	mg/Kg
Cadmium.....	<0.10	mg/Kg
Chromium.....	3.16	mg/Kg
Cobalt.....	1.83	mg/Kg
Copper.....	3.87	mg/Kg
Iron.....	4,751	mg/Kg
Lead.....	4.99	mg/Kg
Manganese.....	113	mg/Kg
Mercury.....	<0.10	mg/Kg
Molybdenum.....	<1.00	mg/Kg
Nickel.....	3.46	mg/Kg
Selenium.....	<0.50	mg/Kg
Silver.....	<1.00	mg/Kg
Uranium.....	31.1	mg/Kg
Zinc.....		mg/Kg

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by df

Reviewed by SB

Quality Control / Quality Assurance

Spike Analysis

Total Metals

Client: Giant Refining
Project: Bloomfield
Lab ID: 0396G01328-31
Matrix: Soil
Condition: Cool / Intact

Date Reported: 08/05/96
Date Sampled: 07/11/96
Date Received: 07/11/96

Spike Analysis

Parameter	Spiked Sample Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Aluminum	9.14	<0.05	10.0	91%
Arsenic	0.029	0.001	0.030	93%
Barium	1.26	0.88	0.50	92%
Boron	0.89	0.44	0.50	99%
Cadmium	0.002	<0.001	0.002	108%
Chromium	0.58	0.07	0.50	103%
Cobalt	0.47	0.03	0.50	89%
Copper	0.007	0.002	0.005	106%
Iron	9.28	<0.025	10.00	93%
Lead	0.032	0.010	0.025	106%
Manganese	1.63	1.24	0.50	98%
Mercury	0.55	<0.10	0.50	98%
Molybdenum	0.53	<0.10	0.50	105%
Nickel	0.56	0.05	0.50	103%
Selenium	0.024	0.001	0.025	92%
Silver	0.003	<0.001	0.003	108%
Uranium	0.95	0.49	0.50	102%
Zinc	0.79	0.27	0.50	109%

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported By: AK

Reviewed By: JB

Quality Control / Quality Assurance**Known Analysis****Total Metals**

Client: Giant Refining
 Project: Bloomfield
 Lab ID: 0396G01328-31
 Matrix: Soil
 Condition: Cool / Intact

Date Reported: 08/05/96
 Date Sampled: 07/11/96
 Date Received: 07/11/96

Known Analysis

Parameter	Found Result	Known Result	Units	Percent Recovery
Aluminum	0.94	1.00	mg/L	94%
Arsenic	0.009	0.010	mg/L	90%
Barium	0.91	1.00	mg/L	91%
Boron	0.95	1.00	mg/L	95%
Cadmium	0.004	0.004	mg/L	100%
Chromium	1.02	1.00	mg/L	102%
Cobalt	0.91	1.00	mg/L	91%
Copper	0.005	0.005	mg/L	100%
Iron	0.96	1.00	mg/L	96%
Lead	0.040	0.040	mg/L	100%
Manganese	1.01	1.00	mg/L	101%
Mercury	0.440	0.400	mg/L	110%
Molybdenum	1.01	1.00	mg/L	101%
Nickel	1.01	1.00	mg/L	101%
Selenium	0.010	0.010	mg/L	100%
Silver	0.004	0.004	mg/L	98%
Uranium	1.19	1.00	mg/L	119%
Zinc	1.01	1.00	mg/L	101%

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
 SW-846, United States Environmental Protection Agency, November, 1986.
 "Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported By: *AS*

Reviewed By: *AB*

Quality Control / Quality Assurance

Blank Analysis Total Metals

Client: Giant Refining
Project: Bloomfield
Lab ID: 0396G01328-31
Matrix: Soil
Condition: Cool / Intact

Date Reported: 08/05/96
Date Sampled: 07/11/96
Date Received: 07/11/96

Blank Analysis

Parameter	Result	Detection Limit (mg/L)
Aluminum	ND	5.00
Arsenic	ND	0.50
Barium	ND	1.00
Boron	ND	5.00
Cadmium	ND	0.10
Chromium	ND	1.00
Cobalt	ND	1.00
Copper	ND	0.10
Iron	ND	2.50
Lead	ND	0.50
Manganese	ND	1.00
Mercury	ND	0.10
Molybdenum	ND	1.00
Nickel	ND	1.00
Selenium	ND	0.50
Silver	ND	1.00
Uranium	ND	20.0
Zinc	ND	5.00

Reference: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
SW-846, United States Environmental Protection Agency, November, 1986.
"Test Methods for Evaluating Solid Wastes", Method 3050, SW-846, 3rd ed., November 1992.

Comments:

Reported by: AK

Reviewed by: SB

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
 Sample ID: 96B-0-1
 Project ID: Bloomfield, NM
 Lab ID: B965848 0396G01328
 Matrix: Soil

Date Reported: 07/31/96
 Date Sampled: 07/11/96
 Date Received: 07/16/96
 Date Extracted: 07/23/96
 Date Analyzed: 07/25/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
Sample ID: 96B-0-1
Project ID: Bloomfield, NM
Lab ID: B965848 0396G01328
Matrix: Soil

Date Reported: 07/31/96
Date Sampled: 07/11/96
Date Received: 07/16/96
Date Extracted: 07/23/96
Date Analyzed: 07/25/96

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery

%

QC Limits

1,2-Dichloroethane-d4	90	70 - 121
1,1,1-trifluoro-2,2,4-trimethylpentane	118	74 - 121
Toluene-d8	113	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst

E. D. 7/31/96

Reviewed

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client:	GIANT REFINING COMPANY	Date Reported:	07/29/96
Sample ID:	96B-0-1	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965848	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/26/96
	0396G01328		

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1.0	mg/kg
Acenaphthene	ND	1.0	mg/kg
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Benzofluoranthene	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Dibenz(a,h)anthracene	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Pyrene	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	65	19 - 122
2-Fluorobiphenyl	57	30 - 115
2-Fluorophenol	49	25 - 121
Nitrobenzene-d5	50	23 - 120
Phenol-d6	69	24 - 113
Terphenyl-d14	47	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst RPD

Reviewed [Signature]

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
 Sample ID: 96B-3-5
 Project ID: Bloomfield, NM
 Lab ID: B965849 0396G01328
 Matrix: Soil

Date Reported: 07/31/96
 Date Sampled: 07/11/96
 Date Received: 07/16/96
 Date Extracted: 07/23/96
 Date Analyzed: 07/25/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client:	GIANT REFINING COMPANY	Date Reported:	07/31/96
Sample ID:	96B-3-5	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965849	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/25/96
	0396G01328		

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

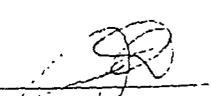
QUALITY CONTROL - Surrogate Recovery % QC Limits

1,2-Dichloroethane-d4	94	70 - 121
o-fluorobenzene	110	74 - 121
Toluene-d8	109	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 7/31/96

Reviewed 

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client:	GIANT REFINING COMPANY	Date Reported:	07/29/96
Sample ID:	96B-3-5	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965849	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/26/96
	0396G01328		

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1.0	mg/kg
Acenaphthene	ND	1.0	mg/kg
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Pyrene	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	62	19 - 122
2-Fluorobiphenyl	51	30 - 115
2-Fluorophenol	44	25 - 121
Nitrobenzene-d5	45	23 - 120
Phenol-d6	64	24 - 113
Terphenyl-d14	49	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst RA

Reviewed [Signature]

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY

Sample ID: 96E-0-1

Project ID: Bloomfield, NM

Lab ID: B965846

Matrix: Soil

0396G01328

Date Reported: 07/31/96

Date Sampled: 07/11/96

Date Received: 07/16/96

Date Extracted: 07/23/96

Date Analyzed: 07/25/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
acetone	7.0	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client:	GIANT REFINING COMPANY	Date Reported:	07/31/96
Sample ID:	96E-0-1	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965846	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/25/96
	0396G01328		

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
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1,2-Dichloroethane-d4	89	70 - 121
1,2-Difluorobenzene	119	74 - 121
Toluene-d8	110	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 7/31/96

Reviewed 

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client:	GIANT REFINING COMPANY	Date Reported:	07/29/96
Sample ID:	96E-0-1	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965846	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/26/96
	0396G01328		

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1.0	mg/kg
Acenaphthene	ND	1.0	mg/kg
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Pyrene	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	65	19 - 122
2-Fluorobiphenyl	62	30 - 115
2-Fluorophenol	57	25 - 121
Nitrobenzene-d5	58	23 - 120
Phenol-d6	75	24 - 113
Terphenyl-d14	46	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst RRD

Reviewed [Signature]

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client: GIANT REFINING COMPANY
 Sample ID: 96E-3-5
 Project ID: Bloomfield, NM
 Lab ID: B965847 0396G01328
 Matrix: Soil

Date Reported: 07/31/96
 Date Sampled: 07/11/96
 Date Received: 07/16/96
 Date Extracted: 07/23/96
 Date Analyzed: 07/25/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg

EPA METHOD 8240
VOLATILE ORGANIC COMPOUNDS

Client:	GIANT REFINING COMPANY	Date Reported:	07/31/96
Sample ID:	96E-3-5	Date Sampled:	07/11/96
Project ID:	Bloomfield, NM	Date Received:	07/16/96
Lab ID:	B965847	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/25/96
	0396G01328		

Parameter	Result	PQL	Units
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Continued

trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg
Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery % QC Limits

1,2-Dichloroethane-d4	95	70 - 121
Peromofluorobenzene	110	74 - 121
Toluene-d8	109	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 7/31/96

Reviewed 

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client:	GIANT REFINING COMPANY	Date Reported:	07/29/96	
Sample ID:	96E-3-5	Date Sampled:	07/11/96	
Project ID:	Bloomfield, NM	Date Received:	07/16/96	
Lab ID:	B965847	0396G01328	Date Extracted:	07/23/96
Matrix:	Soil	Date Analyzed:	07/26/96	

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1.0	mg/kg
Acenaphthene	ND	1.0	mg/kg
Acenaphthylene	ND	1.0	mg/kg
Anthracene	ND	1.0	mg/kg
Benzo(a)anthracene	ND	1.0	mg/kg
Benzo(a)pyrene	ND	1.0	mg/kg
Benzo(b)fluoranthene	ND	1.0	mg/kg
Benzo(g,h,i)perylene	ND	1.0	mg/kg
Benzo(k)fluoranthene	ND	1.0	mg/kg
Chrysene	ND	1.0	mg/kg
Dibenz(a,h)anthracene	ND	1.0	mg/kg
Fluoranthene	ND	1.0	mg/kg
Fluorene	ND	1.0	mg/kg
Indeno(1,2,3-cd)pyrene	ND	1.0	mg/kg
Naphthalene	ND	1.0	mg/kg
Phenanthrene	ND	1.0	mg/kg
Pyrene	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	64	19 - 122
2-Fluorobiphenyl	53	30 - 115
2-Fluorophenol	49	25 - 121
Nitrobenzene-d5	49	23 - 120
Phenol-d6	72	24 - 113
Terphenyl-d14	47	18 - 137

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst RRD

Reviewed [Signature]

LAB QA/QC
EPA METHOD 8240
METHOD BLANKDate Analyzed: 07/26/96
Lab ID: MBS06205
Matrix: Sand
Date Extracted: 07/23/96

Parameter	Result	PQL	Units
1,1,1-Trichloroethane	ND	1.0	mg/kg
1,1,2,2-Tetrachloroethane	ND	1.0	mg/kg
1,1,2-Trichloroethane	ND	1.0	mg/kg
1,1-Dichloroethane	ND	1.0	mg/kg
1,1-Dichloroethene	ND	1.0	mg/kg
1,2-Dichloroethane	ND	1.0	mg/kg
1,2-Dichloropropane	ND	1.0	mg/kg
2-Butanone (MEK)	ND	5.0	mg/kg
2-Hexanone	ND	1.0	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	1.0	mg/kg
Acetone	ND	5.0	mg/kg
Benzene	ND	1.0	mg/kg
Bromodichloromethane	ND	1.0	mg/kg
Bromoform	ND	1.0	mg/kg
Bromomethane	ND	1.0	mg/kg
Carbon Disulfide	ND	1.0	mg/kg
Carbon Tetrachloride	ND	1.0	mg/kg
Chlorobenzene	ND	1.0	mg/kg
Chloroethane	ND	1.0	mg/kg
Chloroform	ND	1.0	mg/kg
Chloromethane	ND	1.0	mg/kg
cis-1,3-Dichloropropene	ND	1.0	mg/kg
Dibromochloromethane	ND	1.0	mg/kg
Ethylbenzene	ND	1.0	mg/kg
m,p-Xylene	ND	1.0	mg/kg
Methylene chloride	ND	5.0	mg/kg
o-Xylene	ND	1.0	mg/kg
Styrene	ND	1.0	mg/kg
Tetrachloroethene (PCE)	ND	1.0	mg/kg
Toluene	ND	1.0	mg/kg
trans-1,2-Dichloroethene	ND	1.0	mg/kg
trans-1,3-Dichloropropene	ND	1.0	mg/kg
Trichloroethene (TCE)	ND	1.0	mg/kg

LAB QA/QC
EPA METHOD 8240
METHOD BLANK

Date Analyzed: 07/26/96
Lab ID: MBS06205
Matrix: Sand
Date Extracted: 07/23/96

Parameter	Result	PQL	Units
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Continued

Vinyl Chloride	ND	1.0	mg/kg
Xylenes (total)	ND	1.0	mg/kg

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	100	70 - 121
Bromofluorobenzene	106	74 - 121
Toluene-d8	105	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E.D. 7/31/96

Reviewed 

LAB QA/QC
A METHOD 8240
LAB CONTROL SAMPLE

Date Analyzed: 07/26/96
Lab ID: LCS96205
Matrix: Sand
Date Extracted 07/23/96

Parameter	Spike Added (mg/kg)	Sample Result (mg/kg)	LCS Result (mg/kg)	LCS % Recovery	QC Limits Rec.
1,4-Dichlorobenzene	2.0	0	1.5	75	70 -130
1,1,2-Trichloroethane	2.0	0	2.0	100	70 -130
1,2-Dibromoethane (EDB)	2.0	0	1.8	90	70 -130
1,2-Dichloroethane	2.0	0	1.8	90	70 -130
1,2-Dichloropropane	2.0	0	1.7	85	70 -130
Benzene	2.0	0	1.8	90	70 -130
Bromoform	2.0	0	1.1	55 *	70 -130
Carbon Tetrachloride	2.0	0	1.5	75	70 -130
cis-1,3-Dichloropropene	2.0	0	1.7	85	70 -130
trichloroethene (PCE)	2.0	0	1.6	80	70 -130
trichloroethene (TCE)	2.0	0	2.0	100	70 -130
Vinyl Chloride	2.0	0	1.2	60 *	70 -130

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
Bromofluorobenzene	121	74 -121
1,2-Dichloroethane-d4	94	70 -121
Toluene-d8	109	81 -117

Spike Recovery: 2 out of 12 outside QC limits.
Surrogates: Surrogate Recoveries within QC Limits.

Analyst E.D. 7/31/96

Reviewed 

Appendix D

Investigation Derived Waste (IDW) Management Plan

All IDW will be properly characterized and disposed of in accordance with all federal, State, and local rules and regulations for storage, labeling, handling, transport, and disposal of waste. The IDW may be characterized for disposal based on the known or suspected contaminants potentially present in the waste. It is assumed that there are no listed wastes present in any of the planned investigation areas. Only drums containing products were stored in the drum storage areas at North Bone Yard (SWMU No. 2) and the warehouse yard (SWMU No. 18). The potentially impacted soils, which were placed in landfill (SWMU No. 18), were delisted in 1996.

A dedicated decontamination area will be setup prior to any sample collection activities. The decontamination pad will be constructed so as to capture and contain all decontamination fluids (e.g., wash water and rinse water) and foreign materials washed off the sampling equipment. The fluids will be pumped directly into suitable storage containers (e.g., labeled 55-gallon drums), which will be located at satellite accumulation areas until the fluids are disposed in the refinery wastewater treatment system upstream of the API separator. The solids captured in the decontamination pad will be shoveled into 55-gallon drums and stored at the designated satellite accumulation area pending proper characterization for off-site disposal.

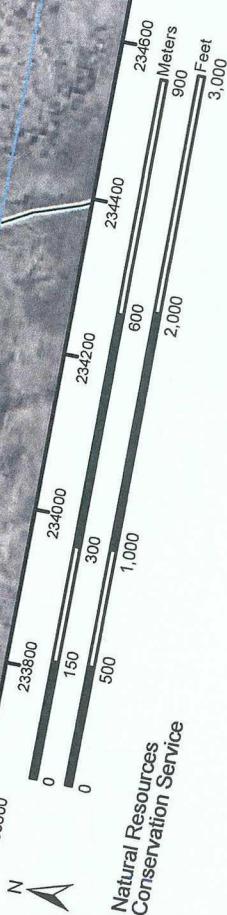
Drill cuttings generated during installation of soil borings and monitoring wells will be placed directly into 55-gallon drums and staged in the satellite accumulation area pending results of the waste characterization sampling. The portion of soil cores, which are not retained for analytical testing, will be placed into the same 55-gallon drums used to store the associated drill cuttings.

Purge water generated during groundwater sampling activities will be containerized in 55-gallon drums and then disposed in the refinery wastewater treatment system upstream of the API separator. All miscellaneous waste materials (e.g., discarded gloves, packing materials, etc.) will be placed into the refinery's solid waste storage containers for off-site disposal.

Appendix E

Soil Survey Map

Soil Map—San Juan County, New Mexico, Eastern Part
(Site Soil Units)



USDA
Natural Resources
Conservation Service

Web Soil Survey 2.0
National Cooperative Soil Survey

MAP LEGEND

	Area of Interest (AOI)		Very Stony Spot
	Soils		Wet Spot
	Soil Map Units		Other
	Special Point Features		Special Line Features
	Blowout		Gully
	Borrow Pit		Short Steep Slope
	Clay Spot		Other
	Closed Depression		Political Features
	Gravel Pit		Municipalities
	Gravelly Spot		Cities
	Landfill		Urban Areas
	Lava Flow		Water Features
	Marsh		Oceans
	Mine or Quarry		Streams and Canals
	Miscellaneous Water		Transportation
	Perennial Water		Rails
	Rock Outcrop		Roads
	Saline Spot		Interstate Highways
	Sandy Spot		US Routes
	Severely Eroded Spot		State Highways
	Sinkhole		Local Roads
	Slide or Slip		Other Roads
	Sodic Spot		
	Spoil Area		
	Stony Spot		

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 13N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 6, Jan 13, 2007

Date(s) aerial images were photographed: 10/9/1997

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Juan County, New Mexico, Eastern Part (NM618)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ax	Avalon sandy loam, 5 to 8 percent slopes	3.3	0.7%
Ay	Avalon loam, 0 to 3 percent slopes	6.1	1.4%
Be	Beebe loamy sand	2.5	0.6%
DN	Doak-Avalon association, gently sloping	166.3	37.5%
FX	Fruitland-Persayo-Sheppard complex, hilly	126.0	28.4%
HA	Haplargids-Blackston-Torriorthents complex, very steep	80.7	18.2%
RA	Riverwash	39.3	8.9%
Sh	Shiprock loamy fine sand, 0 to 2 percent slopes	5.5	1.2%
St	Stumble loamy sand, 0 to 3 percent slopes	9.2	2.1%
SZ	Stumble-Slickspots complex, gently sloping	0.1	0.0%
W	Lakes, rivers, reservoirs	4.5	1.0%
Totals for Area of Interest (AOI)		443.4	100.0%



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AOI Inventory	
Building Site Development	
Construction Materials	
Land Classifications	
Land Management	
Recreational Development	
Sanitary Facilities	
Soil Chemical Properties	
Chemical Soil Properties	
Soil Erosion	
Soil Physical Properties	
Engineering Properties	
Physical Soil Properties	
Soil Qualities and Features	
Vegetative Productivity	
Waste Management	
Water Features	
Water Management	

Report — Chemical Soil Properties								
San Juan County, New Mexico, Eastern Part								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
Ax—Avalon sandy loam, 5 to 8 percent slopes								
Avalon	0-16	4.6-12	—	7.9-8.4	1-5	0-2	2.0-8.0	
	16-80	11-23	—	7.9-8.4	10-20	0-2	2.0-8.0	
	80-84	4.0-11	—	7.9-8.4	15-20	0-2	2.0-8.0	
Ay—Avalon loam, 0 to 3 percent slopes								
Avalon	0-18	9.8-15	—	7.9-8.4	1-5	0-2	2.0-8.0	
	18-60	11-23	—	7.9-8.4	10-20	0-2	2.0-8.0	
	60-64	4.0-11	—	7.9-8.4	15-20	0-2	2.0-8.0	
Be—Beebe loamy sand								
Beebe	0-6	3.1-7.4	—	7.4-8.4	0-1	0	2.0-4.0	
	6-81	0.8-7.4	—	7.4-8.4	0-1	0	2.0-4.0	
DN—Doak-Avalon association, gently sloping								
Doak	0-5	11-19	—	7.4-8.4	0-5	0	0.0-2.0	
	5-43	15-23	—	7.4-9.0	1-10	0	2.0-4.0	
	43-60	15-23	—	7.9-9.0	5-10	0-2	2.0-4.0	
Avalon	0-14	11-15	—	7.9-8.4	0-5	0	2.0-8.0	
	14-60	11-23	—	7.9-8.4	10-20	0-2	2.0-8.0	
	60-64	4.0-11	—	7.9-8.4	15-20	0-2	2.0-8.0	
FX—Fruitland-Persayo-Sheppard complex, hilly								
Fruitland	0-4	4.1-7.6	—	7.4-8.4	5-10	0-1	0.0-4.0	
	4-60	3.1-12	—	7.4-8.4	5-10	0-1	0.0-4.0	
Persayo	0-18	18-23	—	7.9-9.0	0-2	0-2	0.0-8.0	
	18-20	—	—	—	—	—	—	
Sheppard	0-4	2.5-5.4	—	7.9-8.4	0	0	0.0-2.0	
	4-60	2.5-5.4	—	7.9-8.4	0	0	0.0-2.0	
HA—Haplargids-Blackston-Torriorthents complex, very steep								
Haplargids	0-7	7.0-14	—	7.4-8.4	0	0	0.0-4.0	
	7-26	13-23	—	7.4-8.4	0-5	0	0.0-4.0	
	26-60	13-18	—	7.4-8.4	1-10	0	0.0-4.0	
Blackston	0-11	11-18	—	7.9-8.4	0-2	0	0.0-2.0	
	11-26	9.8-17	—	7.9-8.4	10-20	0	4.0-8.0	
	26-60	0.0-4.6	—	7.9-8.4	15-30	0	4.0-8.0	
Torriorthents	0-3	11-17	—	7.4-8.4	0-2	0-2	0.0-4.0	
	3-15	5.7-19	—	7.4-8.4	0-2	0-2	0.0-4.0	
	15-60	—	—	—	—	—	—	
RA—Riverwash								
Riverwash, clayey	0-6	—	—	—	—	—	—	
	6-60	—	—	—	—	—	—	

San Juan County, New Mexico, Eastern Part							
Riverwash, sandy	0-6	—	—	—	—	—	—
	6-60	—	—	—	—	—	—
Riverwash, gravelly	0-6	—	—	—	—	—	—
	6-60	—	—	—	—	—	—
Sh—Shiprock loamy fine sand, 0 to 2 percent slopes							
Shiprock	0-10	8.1-11	—	7.4-8.4	0-2	0	0.0-2.0
	10-60	7.0-13	—	7.4-9.0	0-2	0	0.0-4.0
St—Stumble loamy sand, 0 to 3 percent slopes							
Stumble	0-5	0.0-7.4	—	7.9-8.4	0-2	0	0.0-2.0
	5-29	0.0-7.4	—	7.9-9.0	0-2	0	0.0-2.0
	29-49	0.0-3.1	—	7.9-9.0	0-2	0	0.0-2.0
	49-81	0.0-5.7	—	7.9-9.0	0-2	0	0.0-2.0
Fruitland	0-8	5.7-16	—	7.4-8.4	5-10	0	0.0-4.0
	8-60	3.1-12	—	7.4-8.4	5-10	0	0.0-4.0
SZ—Stumble-Slickspots complex, gently sloping							
Stumble	0-4	0.0-7.4	—	7.9-8.4	0-1	0	0.0-2.0
	4-60	0.0-7.4	—	7.9-9.0	0-1	0	0.0-2.0
Slickspots	0-2	—	—	7.9-9.6	0	0	0.0-8.0
	2-60	—	—	7.9-9.6	0	0	8.0-16.0
W—Lakes, rivers, reservoirs							
Water	—	—	—	—	—	—	—

Description – Chemical Soil Properties

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are based on field observations and on test data for similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen in calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 2 millimeters. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigator and the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the values in this table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

STORMWATER POLLUTION PREVENTION PLAN

Giant Refinery – Bloomfield



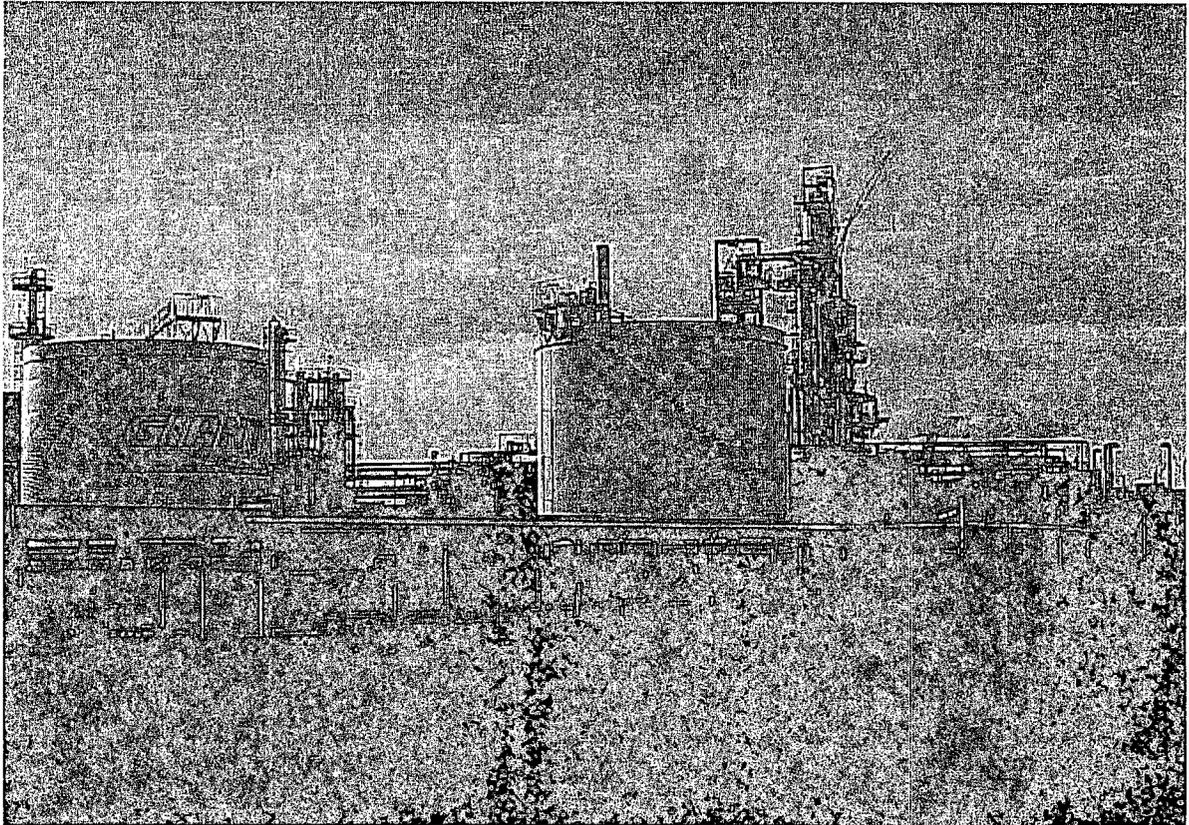
EPA Multi-Sector General Permit No: NMR05B159

July 2007

-50 Road 4990
P.O. Box 159
Bloomfield, NM 87413
Phone: (505) 632-8013

Giant Industries, Inc. – Bloomfield Refinery

Multi-Sector General Permit Stormwater Pollution Prevention Plan



EPA Multi-Sector General Permit
No: NMR05B159

Prepared By:

VECTOR
ARIZONA

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Giant Industries – Bloomfield Refinery

Stormwater Pollution Prevention Plan

Table of Contents

1.0 Introduction	1
2.0 Facility Description	2
2.1 General Information	2
Facility Location	2
Description of Refining Activities	2
3.0 Regulatory Framework	3
3.1 Discharges Authorized Under the MSGP	4
3.2 EPCRA Section 313 Facilities	5
EPCRA Section 313 Thresholds	5
Specific Requirements	5
4.0 Stormwater Pollution Prevention Plan	5
4.1 Pollution Prevention Team	5
4.2 Site Description	6
Description of Refinery Activities	6
Facility Location	6
Stormwater Drainage Basin Analysis	7
Facility Site Maps	8
1. General facility location	8
2. Overall facility map	8
3. Localized maps showing BMP and drainage detail	8
Receiving Waters and Wetlands	8
Summary of Potential Pollutant Sources	9
Outfall 1 Basin	9
Outfall 2 Basin	10
Non-Discharging Basins	10
4.3 Spills and Leaks	11
4.4 Sampling Data	12
4.5 Stormwater Controls	12
Description of Existing and Planned BMPs	12
General Structural Controls	12
Structural BMPs used at Bloomfield	13
Drainage Basin Specific Structural BMPs	14
General Non-Structural Controls	15
Drainage Specific Non-Structural Controls	15
Non-Structural BMPs - Spill Prevention and Response Procedures	16
Non-Structural BMP - Employee Education and Training	17
4.6 Non-Stormwater Discharge Certification	18

4.7 Certification of Discharge Evaluation	18
4.8 Allowable Non-Stormwater Discharges	18
Discharges from Fire Fighting Activities	18
Discharges from Uncontaminated Groundwater or Spring Water	18
Fire Hydrant Flushings	18
Potable Water Including Water Line Flushing	18
Uncontaminated Air Conditioning or Compressor Condensate	18
Irrigation Drainage	18
Landscape Watering (<i>with exceptions</i>)	18
Pavement Wash Waters (<i>with exceptions</i>)	18
Routine External Building Wash Down	18
Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility (not intentional discharge)	19
4.9 Monitoring and Reporting Requirements	19
Quarterly Visual Monitoring Requirements	19
4.10 Threatened and Endangered (T&E) Species	20
Procedures for Complying with T&E Species Certifications	22
Step 1: Are there any Endangered Species or Critical Habitat in Your County and, if so, Are They in Proximity to Your Facility or Discharge Locations?	22
Step 2: Can You Meet Eligibility Criteria "B", "C", or "E"?	25
Step 3: Are Listed Species or Critical Habitat Likely To Be Adversely Affected by Your Facility's Stormwater Discharges, Allowable Non-stormwater Discharges, or Discharge Related Activities?	25
Step 4: Can You Meet Eligibility Criteria "D"?	25
Step 5: Submit Notice of Intent and Document Results of the Eligibility Determination	26
Step 1: Are there any Endangered Species or Critical Habitat in Your County and, if so, Are They in Proximity to Your Facility or Discharge Locations?	26
Step 2: Can You Meet Eligibility Criteria "B", "C", or "E"?	27
Step 3: Are Listed Species or Critical Habitat Likely To Be Adversely Affected by Your Facility's Stormwater Discharges, Allowable Non-stormwater Discharges, or Discharge Related Activities?	27
4.11 Historic Places	28
4.12 Comprehensive Site Compliance Evaluation	29
4.13 Updating the SWPPP	30
5.0 Monitoring and BMP Inspection Procedures	30
5.1 Inspection and Monitoring Schedules	30
BMP Inspection Schedule	30
Outfall Water Monitoring Schedule	31
5.2 Inspection and Monitoring Forms	31
BMP Inspection Form:	31
Annual Site Compliance Inspection Form:	31
Quarterly Visual Monitoring Form:	32
6.0 Reporting Procedures	32
6.1 Analytical Reporting	32
6.2 Additional Reporting Requirement	32
7.0 Document Management	32
7.1 Document Retention	32

7.2 Document Accessibility _____	32
7.3 Addresses _____	33
8.0 Signatory Requirements _____	33
8.1 For a Corporation _____	33
8.2 Stormwater Pollution Prevention Plan Certification _____	34

Attachment 1

NOI

Transmittal of Permit Number from EPA

Attachment 2

Multi-Sector General Permit, October 30, 2000

Final Reissuance of the NPDES Stormwater Multi-Sector General Permit for Industrial Activities; Correction, January 9, 2001

Final Reissuance of the NPDES Stormwater Multi-Sector General Permit for Industrial Activities; Correction, March 23, 2001

Attachment 3

- Administration Area Basin
- Product Terminal
- Process Area
- API Unit Area
- Evaporation Pond Area
- Tank Farm
- Raw Water Pond
- Landfill Area
- Fire Training Area
- Internal Area
- Atmospheric Storage Tanks
- Pressurized Storage Tanks
- Chemical Inventory

Stormwater Basins

Attachment 4

Sample Analysis from Previous Years

Endangered Species Information

Outfall 1 (formerly known as Outfall 5) Sampling Analysis

Outfall 2 (formerly known as Outfall 2) Sampling Analysis

Sample Point 1 (formerly known as Outfall 1) Sampling Analysis

Sample Point 3 (formerly known as Outfall 3) Sampling Analysis

Sample Point 4 (formerly known as Outfall 4) Sampling Analysis

Attachment 5

Quarterly Visual Monitoring Form

WEEKLY BMP INSPECTION FORM – Outfall 1

WEEKLY BMP INSPECTION FORM – Outfall 2

QUARTERLY BMP INSPECTION FORM GENERAL PLANT AND PROCESS
AREAS

ANNUAL SITE COMPLIANCE EVALUATION INSPECTION FORM

Attachment 6

Stormwater Sampling SOP

Public Request Response for SWPPP SOP

Revision Log

Attachment 7

Stormwater Facility Upgrades

Annual Audits and Team Meetings

Facility Upgrades

Attachment 8

Location Map

Figure 1 - Stormwater Map

Figure 2 - Outfall #1

Figure 3 - Outfall #2

Figure 4 - Natural Retention Area

1.0 Introduction

This document provides a Stormwater Pollution Prevention Plan (SWPPP) with Best Management Practices (BMPs) for Giant Industries, Bloomfield Refinery near Bloomfield, New Mexico (Attachment 8). This SWPPP has been prepared in accordance with the requirements of the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) Multi-Sector General Stormwater Permit (MSGP) for Oil and Gas Extraction and Refining (Petroleum Refining) Facilities that was published October 30, 2000.

Discharges from the Bloomfield Refinery (Bloomfield) that are stormwater runoff associated with industrial activities as defined in the Code of Federal Regulations (CFR) at 40 CFR 122.26 are authorized under EPA's Multi-Sector General Permit. The Notice of Intent (NOI) for the facility has been submitted to the EPA (the authorizing agency), and the facility is authorized to discharge stormwater under this MSGP. A copy of the NOI is included with this SWPPP in Attachment 1. A copy of the MSGP, and the two corrections that were issued, is provided (as required) along with this SWPPP in Attachment 2.

This SWPPP describes pollution prevention and control practices designed to minimize the contact of stormwater with "significant materials"¹ prior to its authorized discharge to the Waters of the U.S or manage such water after contact so there is no discharge. The 1998 MSGP was expanded to include refining operations when the Baseline Industrial Permit was terminated. Therefore, Bloomfield's refining activities would be covered under the MSGP. There is a prohibition of discharge for both stormwater discharges that are contaminated from petroleum refining activities regulated under Part 419 and non-stormwater discharges.

Stormwater discharges that are prohibited under this permit are discharges from petroleum refining that are subject to nationally established best available technology economically achievable (BAT) or best practicable control technology currently available (BPT) guidelines found at 40 CFR 419. Any discharges that would be subject to the effluent guidelines in 40 CFR 419 are not eligible for coverage under this permit. Non-stormwater discharges that are not authorized by this permit include discharges of vehicle and equipment washwater including tank cleaning operations.

Contaminated stormwater runoff as defined in Part 419 is considered subject to those effluent limitations and is ineligible for 122.26 discharge of industrial stormwater. Since these Part 419 regulations went into effect in 1985, such "contaminated runoff" under Part 419 is collected, contained and managed in a "zero discharge" NPDES process wastewater management system.

¹EPA defines "Significant Materials" to include, but are not limited to: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

2.0 Facility Description

2.1 General Information

Facility Name and Address: Giant Industries, Inc.
Bloomfield Refinery
50 Road 4990
P.O. Box 159
Bloomfield, NM 87413
Phone: (505) 632-8013

The Facility's MSG permit number is: No. NMR05B159
The Facility's primary SIC code is: 2911 (Onshore Facility – Petroleum Refinery)

Facility Location

The Bloomfield Refinery is located approximately 1 mile south of the town of Bloomfield, New Mexico on County Road 4990 in San Juan County. The site is located at Township 29N, Range 11W, Section 27 on USGS topographic mapping for New Mexico. The major transportation route providing access to the facility is County Road 4990. A general location map for the facility is provided in Attachment 8.

Description of Refining Activities

Bloomfield has crude distillation, hydrotreating for naphtha and distillate, reforming for high-octane gasoline production, and fluid catalytic cracking units. There is also a polymerization unit in place that converts produced liquid petroleum gases (LPGs) back into gasoline. The refining capacity at Bloomfield is 16,600 barrels per day and the products produced are gasoline, diesel, propane, butane, and heavy fuel oils.

Refinery-related functions performed in basins that discharge stormwater under the MSGP are limited primarily to support activities, such as vehicular use of roads to access active areas of the refinery, employee and contractor parking areas, storage of warehouse items, scrap storage (or boneyard) areas, freshwater pumping, groundwater remediation containment areas, and roads used for the inspection of process containment facilities. There are also routine inspections and environmental monitoring that may contribute to stormwater pollutants such as suspended solids. As a result, minimal actions are performed that have the potential to affect stormwater discharges authorized under the MSGP and described in this SWPPP.

Facility boundaries of the Bloomfield Refinery encompass approximately 285 acres. Operations-affected (disturbed) areas of the facility total 180 acres, approximately 15 acres drain to stormwater outfalls. Stormwater that becomes contaminated as defined in Part 419 is contained and managed in a system managed for zero discharge. In addition, the stormwater in many additional areas of the facility are also contained and do not discharge to a stormwater outfall. There are two stormwater basins that, in the case of significant precipitation event are designed to discharge industrial stormwater pursuant to 122.26, at locations denominated at the facility as Outfall 1 and Outfall 2.

3.0 Regulatory Framework

Under the Clean Water Act (CWA) Section 402(a), any person responsible for the discharge of a pollutant into any Waters of the U.S. from any point source must apply for and obtain a permit under the NPDES program. Under CWA Section 402(p), the point source discharge of stormwater “associated with industrial activity” requires a stormwater permit, which limits pollutant loading using narrative effluent limitations – i.e., BMPs.

Under CWA Sections 304(b) and 306(b)(1)(b), EPA published technology-based numeric effluent limitations that apply to specified industry sectors, including “petroleum refining.” For this category, numeric effluent limitations apply to “process waste water” or “contaminated runoff.” In short, if a discharge from a refinery meets the definition of contaminated runoff or process wastewater, it cannot be authorized under the general stormwater permit (which uses narrative effluent limitations). Rather, it must be authorized under an Individual NPDES permit that includes technology-based, numeric effluent limitations².

In the baseline general stormwater permit and accompanying regulations, EPA identified most types of stormwater discharges that are authorized by the permit, and also identified some types of discharges that require an Individual NPDES permit. Subsequent litigation filed in response to the Multi-Sector General Permit caused EPA to increase the types of discharges authorized under the general permit. EPA published a final clarification in the August 7, 1998 Federal Register. On October 30, 2000 the EPA published the Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Stormwater Multi-Sector General Permit for Industrial Activities. This latest version incorporated the clarifications into the existing MSGP, the most notable changes between this current permit and the previous version are the Endangered Species and National Historic Preservation requirements.

Central to the identification of which types of discharges require an Individual NPDES permit are the definitions provided in the General Provisions of the Effluent Guidelines and Standards and the Petroleum Refining Subsections effluent limitations at 40 CFR 401 and 419. Pertinent definitions are provided below.

Point Source: any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged. (40 CFR 401.11(d)).

Pollutant: dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and

² NPDES permits are required for point source discharges of pollutants to Waters of the U.S. When an effluent limitation is promulgated for a specific category of discharge (such as refinery discharge), it is based on treatment of the waste stream using technologically feasible methods. A specific numeric limitation must be achieved prior to discharge. This type of discharge is authorized under an “individual” NPDES permit. In the case of stormwater, specific numeric limitations have not been promulgated, rather, narrative standards have been promulgated. These narrative standards are “best management practices” (BMPs) and the discharge can be authorized under a “general” NPDES permit (i.e., stormwater permit).

industrial, municipal and agricultural waste discharged into water. (40 CFR 401.11(f)).

Pollution: the man-made or man induced alteration of the chemical physical, biological, and radiological integrity of water. (40 CFR 401.11(g)).

Discharge of Pollutant(s): the addition of any pollutant to navigable waters from any point source (40 CFR 401.11(h)).

Effluent Limitation: any restriction established by the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters. (40 CFR 401.11(i)).

Effluent Limitation Guidelines: any effluent limitation guidelines issued by the Administrator pursuant to Section 304(b) of the Clean Water Act (40 CFR 401.11(j)).

Process Waste Water: any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. (40 CFR 401.11(q)).

Runoff: the flow of water resulting from precipitation coming into contact with petroleum refinery property (40 CFR 419.11(b)).

Feedstock: the crude oil and natural gas liquids fed to the topping units (40 CFR 419.11(d)).

Once-Through Cooling Water: those waters discharged that are used for the purpose of heat removal and that do not come into direct contact with any raw material, intermediate, or finished product (40 CFR 419.11(e)).

Contaminated Runoff: runoff which comes into contact with any raw material, intermediate product, finished product, by-product, or waste product located on petroleum refinery property (40 CFR 419.11(g)).

3.1 Discharges Authorized Under the MSGP

Guidance as to what areas of the Refinery qualify for the MSG permit is provided in the MSGP, Parts 1.2.1, and 6.1.1 in the October 20, 2000 Federal Register Notice and in the preambles to Part 419 regulatory development as to what is covered by the term "contaminated runoff" subject to Part 419 instead of 122.26.

In summary, stormwater discharges that do not commingle with process waste waters or are not considered contaminated runoff qualify for the MSGP. Inclusion of process waste waters or contaminated runoff in stormwater discharges is a violation of the Clean Water Act.

The New Mexico regulations found in 20.6.4 states that standard exceedances due to natural conditions do not violate standards. Specifically section **20.6.4.11.1. Exceptions** states that numeric criteria for temperature, dissolved solids, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply when changes in temperature, dissolved solids, dissolved

oxygen, sediment or turbidity in a surface water of the state are attributable to natural causes³.

3.2 EPCRA⁴ Section 313 Facilities

EPCRA 313 facilities must identify potential pollutant sources for which reporting is required must be identified in the summary of potential pollutant sources as per Part 4.2.4 and part 4.12 of the MSGP.

EPCRA Section 313 Thresholds

There are two specific thresholds dealing with the number of employees and Section 313 chemicals that must be met before a facility is subject to reporting under EPCRA 313. Bloomfield meets these thresholds so the requirements under this section and the additional requirements in Section 13.9.2.5 of the MSGP apply.

Specific Requirements

Section 13.9.2.5 of the MSGP specifically requires that liquid storage areas for Section 313 water priority chemicals shall be operated minimizing discharges of such chemicals. Appropriate measures to minimize discharges of Section 313 chemicals shall include: provision of secondary containment for at least the entire contents of the largest tank plus sufficient freeboard to allow for the 25-year, 24-hour precipitation event; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

There are no liquid Section 313 chemicals managed in discharging basins at Bloomfield. The specific requirement listed above does not apply and only the general identification requirement for identification applies.

4.0 Stormwater Pollution Prevention Plan

4.1 Pollution Prevention Team

The SWPPP requires the development and training of a Stormwater Pollution Prevention Team. It is the team's responsibility to ensure that the SWPPP is implemented effectively. Components of the preventive maintenance and inspection program, and selected tasks identified in the overall SWPPP, will be supervised and/or carried out by the Stormwater Pollution Prevention Team. Team members and their assigned tasks and responsibilities are identified in the following table.

³ "Natural causes" means those causal agents that would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

⁴ EPCRA refers to the Emergency Planning and Community Right-to-Know Act

Team Assignment	Team Member
Plan Manager	Refinery Manager
Plan Development	Environmental Manager
Plan Implementation	The following managers or their designees and General Manager, Operations Manager, Maintenance Manager, Technical Services Manager, Purchasing and Warehousing Manager, Safety Manager, Environmental Manager, and Environmental Coordinator
Site Inspector	Managers (or designees) OR Environmental Superintendent (or designee)
Recordkeeping	Environmental Coordinator (or designee)
Training	Environmental Coordinator (or designee)
Spill Prevention and Reporting	Environmental Manager (or designee)

4.2 Site Description

Description of Refinery Activities

The Bloomfield Refinery is engaged in the processing of feedstocks using distillation, hydrotreating, reforming, fluid catalytic cracking, and polymerization. Most of this activity is performed in enclosed "zero discharge" basins, and as such do not affect the quality of stormwater discharges at the Bloomfield Refinery.

Refining-related functions performed in basins that discharge stormwater under the MSGP are limited primarily to support activities, such as vehicular use of roads to access active areas of the refinery, employee and contractor parking areas, storage of warehouse items, scrap storage (or boneyard) areas, and roads used for the inspection of process containment facilities. There are also routine inspections and environmental management that may contribute pollutants to stormwater.

Facility boundaries of the Bloomfield Refinery encompass approximately 285 acres. Operations-affected (disturbed) areas of the facility total 180 acres, approximately 15 acres drain to stormwater outfalls. Stormwater that becomes contaminated as defined in Part 419 is contained and managed in a system managed for zero discharge. In addition, the stormwater in many additional areas of the facility are also contained and do not discharge to a stormwater outfall. There are two stormwater basins that, in the case of significant precipitation event are designed to discharge industrial stormwater pursuant to 122.26, at locations denominated at the facility as Outfall 1 and Outfall 2.

Facility Location

The Bloomfield Refinery is located approximately 1 mile south of the town of Bloomfield, New Mexico on County Road 4990 in San Juan County. The site is located at Township 29N, Range 11W, Section 27 on USGS topographic mapping for New Mexico. The major transportation route providing access to the facility is County Road 4990. A general location map for the facility is provided in Attachment 8.

Stormwater Drainage Basin Analysis

For the purposes of this SWPPP, the Bloomfield Refinery is divided into drainage basins illustrated on the Stormwater Map provided in Attachment 8. Each basin has been delineated according to natural topography and constructed diversions. The basins are grouped in the following five categories:

- Basins that drain runoff into contained basins, where it is collected and recycled for use as process water (not 122.26 stormwater);
- Basins that drain runoff into contained basins where it is collected and allowed to evaporate or infiltrate (not 122.26 stormwater);
- Basins that divert stormwater around 122.26 industrial activities (and any Part 419 areas) so that it does not come into contact with regulated activity (unregulated water);
- Basins that drain areas that are not part of the 122.26 industrial activities (nor Part 419 activities) but may provide a contribution to the stormwater leaving the facility (not 122.26 stormwater for the purposes of this permit); and
- Basins that discharge 122.26 industrial stormwater into designated outfalls (122.26 stormwater for which discharge is authorized under the MSGP).

Enclosed basins that do not discharge runoff:

- Process Area
- Evaporation Ponds
- Tank Farm
- API Area
- Fire Training Area
- Raw Water Pond
- Landfill
- Administration Area
- Product Terminal

In each of the basins listed above, runoff reports to "drains" that report to the API unit and are subsequently contained within "zero discharge" facilities owned and operated by Bloomfield, or the runoff reports to another "zero discharge" containment owned and operated by Bloomfield. These basins do not discharge stormwater to the Waters of the U.S. and are not subject to the provisions of the MSG Permit. Therefore, *no further assessment of stormwater in these basins is provided in this SWPPP.*

The Administration Area and the Product Terminal storm runoff is managed in a natural retention area that does not discharge. Therefore, *no further assessment of stormwater in this area is provided in this SWPPP.*

The following statement is provided in the MSGP 6.I.1 Covered Stormwater Discharges:

The requirements in Part 6.I apply to stormwater discharges associated with industrial activity from Oil and Gas Extraction and Refining facilities.....

An irrigation ditch to the north, the Hammond Ditch, routes run-on around a portion of the Bloomfield Refinery Operations. Therefore, water discharging from the diversion would not need coverage under the MSGP and *no further assessment of stormwater in this area is provided in this SWPPP.*

In an area between the irrigation ditch and the San Juan River, a freshwater tank and associated pumps, a freshwater collection pond, and a bio-venting project are in place.

Stormwater Drainage Basin Analysis

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- Process Area
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The Administration Area and the Product Terminal storm runoff is managed in a natural retention area that does not discharge. Therefore, *no further assessment of stormwater in this area is provided in this SWPPP.*

The following statement is provided in the MSGP 6.1.1 Covered Stormwater Discharges:

The requirements in Part 6.1 apply to stormwater discharges associated with industrial activity from Oil and Gas Extraction and Refining facilities.....

An irrigation ditch to the north, the Hammond Ditch, routes run-on around a portion of the Bloomfield Refinery Operations. Therefore, water discharging from the diversion would not need coverage under the MSGP and *no further assessment of stormwater in this area is provided in this SWPPP.*

In an area between the irrigation ditch and the San Juan River, a freshwater tank and associated pumps, a freshwater collection pond, and a bio-venting project are in place.

This area is not part of the 122.26 industrial activities and do not contain significant materials that could contribute to stormwater leaving the facility. Therefore, *no further assessment of stormwater in this area is provided in this SWPPP.*

Basins that discharge stormwater include:

- Outfall 1 Basin
 - Regional Office Building
 - Transportation Maintenance Building
- Outfall 2 Basin
 - Interior Roadways

Stormwater from these basins discharges at outfall locations that are tributary to the San Juan River. Therefore, the discharges are subject to provisions of the MSGP, as implemented by this SWPPP. Proper characterization of the basins is required as a permit condition, so an assessment of each principal basin characteristics is outlined below.

- Location and identification of materials exposed to stormwater.
- Activities in the area
- A list of the potential pollutant(s) or pollutant parameter(s) for each activity. This list must include all significant materials that have been handled, treated, stored, or disposed in a manner to allow exposure to stormwater between the time of three (3) years before being covered under this permit and the present.
- Location of areas with a high potential for significant erosion that may affect stormwater quality⁵.
- Assessment of risk for significant amounts of pollutants to enter into the storm drainage system.

An assessment of these characteristics is provided for each stormwater drainage basin in the following sections. General descriptions of BMPs that are applicable to the facility are provided. Additionally, descriptions of BMPs used to control stormwater throughout each basin, including a more specific discussion of BMPs used at each stormwater outfall, are provided in this plan.

Facility Site Maps

Due to the size of the facility, several maps were used to legibly show all BMPs in place at Bloomfield. Those maps are described below and are included in Attachment 8.

- 1. General facility location**
- 2. Overall facility map**
- 3. Localized maps showing BMP and drainage detail**

Receiving Waters and Wetlands

The nearest receiving waters for stormwater discharges from our facility are:

⁵ EPA does not provide a definition or description of what constitutes an "area with a high potential for significant erosion that may affect stormwater quality." As a result, the areas identified in this plan are based on a qualitative assessment of grade (steepness of slope) and propensity for erosion of earth materials exposed to stormwater.

Basin	Receiving Waters
Outfall 1 Basin	San Juan
Outfall 2 Basin	San Juan

Summary of Potential Pollutant Sources

Part 4.2.4 of the MSGP requires a summary of potential pollutant sources that must identify where industrial materials or activities are exposed to stormwater. For each separate area identified, the description must include: activities in the area (Part 4.2.4.1) and pollutants (Part 4.2.4.2). In addition, part 6.1.4.2 of the MSGP requires a summary of sources and activities that have potential pollutants associated with them. The MSGP also requires information about RQ spills, cleanup activities, areas affected, procedures to clean up releases and actions or procedures taken to prevent releases; and remaining potential contamination of stormwater from the release.

Outfall 1 Basin

This basin is located in the southern portion of the refinery area outlined in the Stormwater Catch Basins Map in Attachment 8. Features that are located within this basin include:

- Regional Office Building,
- Transportation Maintenance Building,
- Parking areas, and
- Paved, Public Roads.

The access road to the Regional Office Building and Transportation Maintenance Building is a public road that is shared with a residential area south of the refinery. The Regional Office Building and parking areas have no significant materials located within them. The Transportation Maintenance Building contains petroleum products and other chemicals used in truck maintenance. A used oil tank with a containment and a double-walled lubricant tank are located outside near the building.

Significant Materials

Significant materials stored and used in this basin are minimal. Materials consist of the products stored at the Transportation Maintenance Building and drips from vehicles onto the parking areas. In addition to the products in storage outside at the Transportation Maintenance Building, the pollutant of concern that may be associated with this area is total suspended solids (TSS).

The Transportation Maintenance Building has the following significant materials stored on a regular basis outside:

- Lubricant
- Used Oil

Both of the containers for these materials have secondary containment and have a minimal risk of contact to stormwater.

Even though most of the products are stored inside, the maintenance area will have the associated lubricants, greases, and cleaning products necessary to maintain equipment. A strong housekeeping and inspection program will keep the impact from this area to a minimum.

The basin consists of approximately 10 acres, most of which is paved with asphalt.

Erosion Potential

Significant erosion potential exists in any area that has natural drainage channels, where topography is steep, or where stormwater runoff flows are concentrated.

Risk Assessment

The risk for exposure and discharge of significant materials to stormwater in this basin is considered **low**. Reasons for this assessment are outlined below.

There is a remote possibility that petroleum could be spilled in the basin and discharged to stormwater in the event of a vehicular accident on the basin access roads or parking area. However, in such an event, Bloomfield would quickly remove the petroleum product, pursuant to the requirements of the SPCC Plan. TSS from the site will be mitigated by the rip-rap lined channels which will cause the water to slow and drop the suspended solids out.

Outfall 2 Basin

This basin is located in the northern portion of the refinery facility outlined in the Stormwater Map in Attachment 8. The portion of this facility that contributes stormwater flow to the outfall consists of interior plant roads.

Significant Materials

Significant materials stored and used in this basin are minimal. The materials consist of petroleum products in the pipes and roadways and berms made of natural materials. Pollutants of concern that may be associated with this area are TSS with some potential for petroleum products if a pipe bursts during a storm.

The basin consists of approximately 3.5 acres and most of the area in the basin is disturbed.

Erosion Potential

Significant erosion potential exists in any area that has natural drainage channels or where stormwater runoff flows are concentrated.

Risk Assessment

The risk for exposure and discharge of significant materials to stormwater in this basin is considered **low to moderate**. Reasons for this assessment are outlined below.

There is a remote possibility that petroleum could be spilled in the basin and discharged to stormwater in the event of a pipeline burst during a storm event or a vehicular accident on the basin access roads. However, in such an event, Bloomfield would quickly remove the petroleum product, pursuant to the requirements of the SPCC Plan. TSS from the plant site will be mitigated by the stormwater detention ponds that will cause the water to slow and drop the suspended solids out.

Non-Discharging Basins

Please see drainage basin analysis in Attachment 3 for the materials stored in each of the non-discharging basins.

4.3 Spills and Leaks

The Bloomfield Refinery has experienced no significant spills⁶ or leaks of toxic, or hazardous pollutants in areas that are exposed to precipitation or otherwise drain to a stormwater conveyance during the period of three years prior to the submittal of the NOI to discharge stormwater. Minor spills have occurred and were reported to the New Mexico Oil Conservation Division.

Spills to areas that discharge to an outfall include:

- On January 9, 1998, approximately 2 barrels of treated wastewater overflowed a containment pad and flowed into the side ditch along County Road 4990. Most of the spilled material was recovered using a vacuum truck. Some of the wastewater absorbed into soil before it could be recovered.
- On January 12, 1999, approximately 3,150 gallons of treated process wastewater spilled into the south side ditch on County Road 4990 west of the regional office building. The spilled material was contained by an earthen dike installed in an arroyo downstream of the spill.

Spills within the process areas that had no chance to come into contact with stormwater or to discharge to Waters of the United States are included below to ensure completeness.

- On January 17, 1998, approximately 1,800 barrels of treated process wastewater spilled outside the north evaporation pond. The spilled material was contained, recovered, and returned to the evaporation pond.
- On March 3, 2000, approximately 500 barrels of Reformate spilled inside the dike at Tank #5. The spilled material was recovered using a vacuum truck and recycled.
- On October 30, 2000, approximately 80 barrels of Isomerate was spilled near the LPG Bullets near the Terminal. The spilled material was recovered with a vacuum truck and recycled.
- On January 19, 2001 The Crude Unloading Sump overflowed and approximately 25 barrels of crude spilled into an earthen berm. The free-standing product was recovered with a vacuum truck and recycled. The bermed area was remediated in place.
- On January 25, 2004 approximately 118 gallons of unleaded gasoline was spilled at the Truck Fueling station located west of the Auxiliary Warehouse. The impacted soil was removed and disposed of at an OCD approved waste facility. Clean fill dirt replaced the impacted soil in the area.
- Mechanical failure on Giant's Class I Injection Well pump (P-670) resulted in a 1000 gallon spill of treated process water on January 30, 2004. Eight hundred gallons were recovered using a vacuum truck.

⁶ "Significant spills" includes, but is not limited to releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.0 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

In Section 3.1.1 of the MSGP, EPA requires reporting of not only petroleum releases (normally reported under the SPCC Plan), but also CERCLA releases under 40 CFR 302.4. Reporting to the National Response Center is required as soon as the operator has first knowledge of the release, followed by a written report within 14 calendar days of knowledge of first release. A summary of reporting requirements follows:

- Oral Notice following first knowledge: NRC @ (800) 424-8802
- Written report to EPA Regional Office within 14 days of first knowledge (with the following information)
 - Description of the release
 - Circumstances leading to the release
 - Date of the release

In addition, Section 3.1.1.2 of the MSGP requires that the SWPPP will be revised within fourteen (14) calendar days in the event of a significant spill or leak of toxic or hazardous pollutants in areas exposed to precipitation, or that otherwise drain to a stormwater conveyance system.

In addition, the SWPPP will be reviewed by Bloomfield to identify measures to prevent the reoccurrence of such releases and to respond to incidents in the event of such a release.

4.4 Sampling Data

Bloomfield has participated in the MSGP program since the issuance of this permit. The results of stormwater samples taken prior to that date as well are summarized and included in Attachment 4.

4.5 Stormwater Controls

BMPs are developed to minimize the potential for non-point source pollution to surface waters. The policy employed by Bloomfield is to minimize the potential for pollution by reducing on-site material inventories, providing appropriate material storage areas for significant materials, and using appropriate sediment and erosion control in areas exposed to stormwater.

Methods that minimize the exposure of pollutants to stormwater runoff include both structural and non-structural controls (BMPs). A list of traditional structural and non-structural control practices that are applicable to the facility is provided in the following section. Specific descriptions of structural controls used in stormwater basins throughout the facility and at stormwater outfalls are provided below. Specific descriptions of non-structural controls, such as inspection and monitoring procedures are also provided below. Forms have been generated for helping to monitor the BMPs as required on a monthly basis. These forms are in Attachment 5.

Description of Existing and Planned BMPs

General Structural Controls

Structural controls used at the facility include:

- Stormwater diversions
- Erosion and sediment control measures
- Stabilization practices
- Collection facilities
- Sediment traps

- Energy dissipaters

Appropriate structural control methods are employed at the facility when and where conditions require. Structural control measures that have been, and will continue to be, used at the facility include:

- Diverting runoff away from roads and other denuded areas by using culverts, berms, ditches, and other functionally equivalent diversions.
- Preparation of road drainages and outlets by removing fugitive outfalls and consolidating runoff into designed outfall structures that are capable of managing the expected runoff volume.
- Reducing runoff velocities by using energy dissipation devices and minimizing grades, where practical.
- Trapping sediment on-site in detention ponds, sumps, and other functionally equivalent structural controls.
- Capturing runoff, when practicable, to eliminate the potential for stormwater discharges.

In addition, wherever possible, structural control planning is conducted to include the following elements:

- Fit development to terrain when possible.
- Time maintenance activities, such as road grading and BMP upkeep, to minimize soil exposure to stormwater.
- Retain existing vegetation whenever feasible.
- Divert direct drainage channels to open areas to create a sheet flow effect that does not discharge from the open area.
- Vegetate or cover areas that are susceptible to erosion.

Structural BMPs used at Bloomfield

The following further describes the specific structural BMPs that are used to control storm drainage throughout the facility and the facility's discharge outfalls. (Note: "discharge outfall" is the location where stormwater is discharged to a natural drainage that leads off of the facility property.) The outfalls are identified on the maps in Attachment 8 with an "Outfall 1" or "Outfall 2" designation, and associated BMPs are shown on the detail maps that follow in that same attachment.

Berms and Channels

Berms are designed to contain and direct stormwater runoff and may be constructed along roads or may be installed in other areas where control of stormwater runoff is necessary. Berms that are constructed along roads are designed to control stormwater runoff.

Berms are often constructed by blading roads or other surface areas, as necessary, to control storm runoff. As such, channels or ditches are often a feature used in conjunction with the berm because the channel is cut, which supplies material for the berm. Typical dimensions for berms used for stormwater control are a minimum height of 8 inches with a side slope of approximately 2:1 (H:V) or flatter and a top width of approximately 2 feet. Berms may be compacted where access across the berms are necessary.

Channels are typically cut to a depth of at least 6 inches with a 2:1 (H:V) side slope, and a width that corresponds to the amount of flow being carried in the channel. Berms and channels are most effective for storm runoff control when they are located in areas with positive drainage (i.e., minimum slope of 0.5 to 3 percent).

Riprap

Stormwater can be properly controlled by placing riprap into areas that have been incised due to flow volume or velocity. In these circumstances, the riprap reduces flow velocity and minimizes the contact of concentrated stormwater flows with erosive sediment.

Channel and outfall protection is often necessary to dissipate flow velocity in areas where runoff is concentrated and has increased erosion potential. Appropriate protection includes a riprap lining located in areas where runoff is directed by constructed channels, especially at stormwater outfalls.

Outfall and Outlet Settling Ponds

When used, settling ponds are typically constructed before discharge outfalls, and at areas ahead of culvert inlets if possible. They are designed to temporarily detain runoff so that entrained sediment can settle prior to stormwater discharge. Settling ponds vary in size, from small structures (sometimes referred to as check dams), that collect readily settleable sediment, to large structures capable of containing much of the runoff from moderate storm events. The large structures are outfitted with valved pipes that must be opened before a discharge occurs. This allows water quality to be checked prior to discharge. Piping is typically placed so that water is drawn from the bottom of the pond which will allow control over discharge of floating debris or any visible sheen.

Vegetative Cover

Over the long-term, vegetative cover is the most effective stormwater control. Self-generating vegetation with sufficient groundcover can stabilize soils sufficiently to preclude the need for other types of structural BMP controls. Many areas of the stormwater basins have areas of undisturbed, native plant species that minimize the amount of sediment collected by structural BMPs.

Treatment

Stormwater detention ponds are used to minimize discharge of solids by slowing water to allow sediments to settle. This takes place in the Outfall 2 basin, and many locations in the non-discharging basins.

Drainage Basin Specific Structural BMPs

Structural BMPs have been installed in the drainage basins identified previously. Each BMP has been constructed to provide appropriate storm runoff control and adequate sediment and erosion protection to reduce sediment loading in receiving waters. Outfalls that discharge stormwater to natural drainages that flow off of facility property are shown on the maps in Attachment 8 of the SWPPP with an "Outfall 1" and "Outfall 2" designation. There are no representative outfalls at Bloomfield.

Outfall 1 Basin

Structural BMPs in the Outfall 1 Basin are used to control storm runoff from administrative office areas, parking areas, maintenance buildings, and areas that are untouched and still contain natural vegetation. The following structural BMPs are used:

- Flows are directed using road berms and channels toward the stormwater outfall or a sediment traps.
- Rip-rap is used in the main channel and in a culvert inlet basin to reduce erosion by dissipating velocity and providing cover for the ground in the area.
- Culverts installed under the access roads to segregate stormwater and direct it to the appropriate drainage areas.
- Areas that are not needed for operations maintain their native vegetation which will help minimize sediment loading.

Outfall 2 Basin

The following structural BMPs are used in the Outfall 2 basin:

- Roadways, road berms, and channels with periodic outlets inside the basin direct flows in the drainage.
- Culverts installed under the access roads to allow un-impacted runoff and/or stormwater to pass under the roadways and to the appropriate drainage areas.
- Process areas are segregated from Outfall 2 by berms, concrete pads and liners. The process area will gravity drain to a zero discharge wastewater treatment system. In addition, the process areas are bermed to further prevent spills or contaminated runoff from entering the 122.26 stormwater Outfall 2 Basin. Any storage of petroleum materials outside the gravity drained process area is also bermed to isolate spills from any 122.26 stormwater that might be discharged.
- Areas that are not needed for operations maintain their native vegetation which will help minimize sediment loading.
- A rip-rap berm prevents stormwater from flowing into the aeration pond.

General Non-Structural Controls

Non-structural controls are procedures, management actions, and other policy activities that are employed to reduce the potential for pollutant loading in stormwater outfalls.

Appropriate non-structural controls for the facility include:

- good housekeeping measures
- routine inspections
- training
- maintenance of refinery components that potentially affect stormwater

Good housekeeping - as a non-structural control method, is practiced at the facility on an as needed basis. Good housekeeping measures include, but are not limited to storage of materials in areas that are not exposed to precipitation and do not drain to stormwater outfalls, removal of non-essential products and waste materials from the site, and removal of debris from stormwater drainage areas.

Routine inspections - facility stormwater BMPs, such as run-on diversion and stormwater conveyance systems, are routinely inspected to ensure that they are functioning effectively. The MSGP Section 6.I.4.4.1 requires that sediment and erosion control measures must be inspected every seven (7) days. The inspections are conducted and recorded as provided on the BMP forms (see Attachment 5). Routine inspections provide the mechanism for verifying that BMPs are functioning properly. Alternatively, the inspections may identify that existing BMPs may require maintenance or that additional BMPs are required to effectively control stormwater runoff.

Training – facility personnel are trained in the requirements of the stormwater plans, the proper operation and necessity of stormwater BMPs, and the requirement to ensure that stormwater does not commingle with impacted waters from process areas.

Maintenance - of facility components is a routine procedure that is performed pursuant to good operating practices. This program's beneficial components such as auxiliary generators, storage tanks, etc., which are exposed to precipitation, are maintained such that exposure of significant materials is minimized. This ensures that the potential for pollutants in stormwater discharges from these sources is minimized or eliminated.

Drainage Specific Non-Structural Controls

Non-structural BMPs applied to the specific drainage basins identified previously. Each BMP consists of routine inspection to ensure the system is functioning effectively.

Outfalls that discharge stormwater to natural drainages that flow off of facility property are shown on the maps in Attachment 8 of the SWPPP with an "Outfall 1" or an "Outfall 2" designation. In addition, normal operational procedures require good housekeeping standards be adhered to in all respects.

Outfall 1 Basin

Inspection of the Outfall 1 Basin requires evaluating the effectiveness of drainage channels and berms along roads in conveying stormwater to outlets, and checking that the stormwater is flowing to the outfall. The inspection will also ensure that road drainage channels and drop inlets are free-flowing and free of debris.

Finally, weekly inspections in this area will review the velocity dissipation devices, sediment traps, and drop inlets. These inspections will determine if the devices need to be repaired, replaced, or cleaned and if the rip-rapped basin is effectively collecting sediment and whether it requires sediment removal.

Outfall 2 Basin

Inspection of this basin requires evaluating the effectiveness of roads, drainage channels, and berms along roads in conveying stormwater to the drainage. In addition, it will be ensured that road drainage channels and culverts are free-flowing and free of debris.

Inspections in this basin also determine the condition of the process area or materials storage berms that are interior to the basin to ensure that there are no breaks or areas that have pollutants that could be carried to a stormwater outfall.

Finally, weekly inspections in this area will review the velocity dissipation devices, sediment traps, and stormwater barriers. These inspections will determine if the devices need to be repaired or replaced, and whether the stormwater dams are effectively collecting sediment and whether they require sediment removal.

In addition to fulfilling the weekly inspections discussed above, the annual inspection includes reevaluation of the drainage basin, stormwater implementation supplies, and BMPs in use. First, it will be ensured that no new significant materials are stored or used in the basin. Second, a confirmation that adequate equipment and supplies required to maintain the stormwater program are available. Third, if meaningful improvements to the quality of discharged stormwater can be made by modifying existing BMPs or installing new BMPs, those recommendations will be made in the annual inspection form.

Non-Structural BMPs - Spill Prevention and Response Procedures

Part 4.2.7.2.1.4 of the MSGP requires this plan to identify areas where it is reasonable to believe that a potential spill can contribute to the facility's stormwater discharge. This potential is significantly reduced by locating most refinery-related activities in basins that do not discharge to stormwater. A summary of the remaining areas for reasonable spill potentials is provided below.

Vehicle Accident

Vehicular accidents could occur on access roads in all basins. Such an accident may involve a release of petroleum product from a damaged vehicle. The risk associated with such a release is considered low and the volume associated with a release of product from a damaged passenger vehicle can easily be controlled using spill kits and good housekeeping techniques.

Additionally, a vehicle accident could involve a petroleum product tanker on the entrance roadway, in the parking area, at the truck loading rack, or at the transportation

maintenance building. The risk associated with a release from a vehicular accident involving a product tanker is minimal.

Pipelines

Pipelines carry petroleum products throughout the Bloomfield Refinery. An accident involving a pipeline or a leak in a pipeline could result in a release of a petroleum product. Most pipelines are located such that there is containment around the pipelines in the form of berms that direct flow into process areas. Pumping and discharge rates are continually monitored so that discrepancies can be investigated immediately - in some cases automatic shut-offs kick in immediately. There is a slight chance of a release from pipelines outside of the containment areas. In addition, process pipelines are inspected at least once per shift and have controls that will minimize the solutions flows into the pipes by shutting down pumps when a problem is detected.

Maintenance Areas and Boneyards

Maintenance areas at Bloomfield are concentrated in areas that discharge to Outfall 1. Boneyards are located in areas within the plant but contain no significant materials. There is little chance of a release of significant materials from any of these areas.

Non-Structural BMP - Employee Education and Training

An employee awareness, orientation and training program will be conducted annually for facility personnel. The education program will inform personnel of the components and goals of the project's SWPPP. The following table identifies six modules that each annual training session will address.

Annual Employee Training Requirements

Module	Description	Training Requirements
1	Housekeeping and Source Control Measures	Review routine housekeeping measures and issues; Review procedures for minimizing pollutant sources
2	Facility inspection procedures and maintenance of structural BMPs	Review facility inspection procedures and schedules Completing BMP inspection forms Maintenance of BMPs Review BMP plan
3	Annual Facility Compliance Evaluation	What to Evaluate Completing the Forms
4	Monitoring and record-keeping	Review monitoring procedures and schedules Review prior year records and record-keeping procedures
5	Spill Prevention, Response, and Reporting	Review facility SPCC Plan and spill response, containment and cleanup measures Review spill notification procedures
6	Annual Reporting	Compiling and reporting analytical monitoring for refining activities Filling out Discharge Monitoring Reports (DMRs)

Documentation for stormwater management training sessions can be found in separate binder in environmental office.

4.6 Non-Stormwater Discharge Certification

This facility has been evaluated for the presence of, or potential for, unauthorized non-stormwater discharges to its stormwater conveyance systems. Based on this evaluation and modifications made to the facility to ensure there is no commingling, the facility does not have any non-stormwater discharges to its stormwater conveyance systems. This evaluation was conducted in accordance with the provisions provided in paragraph 4.4.1 of the MSGP.

4.7 Certification of Discharge Evaluation

Section 4.4.1.3 requires that the facility test or evaluate for the presence of specific non-stormwater discharges or discharges subject to effluent limitations guidelines. This facility has been evaluated for the presence of, or potential for, unauthorized non-stormwater discharges to its stormwater conveyance systems. Based on this evaluation, the facility does not have any non-stormwater discharges to its stormwater conveyance systems. This evaluation was conducted in accordance with the provisions provided in paragraph 4.4.1.1 of the MSGP.

4.8 Allowable Non-Stormwater Discharges

This facility has been evaluated for the presence of authorized non-stormwater discharges to its stormwater conveyance systems. Based on this evaluation, the facility does have some of the non-stormwater discharges listed in Section 1.2.2.2. In order to be eligible for these discharges to be allowed, the SWPPP must include the information specified in 4.4.2. This information follows:

Discharges from Fire Fighting Activities

Fire fighting training activities regularly occur at the Fire Training Area and fire fighting activities can occur anywhere on the property so discharges associated with this activity could occur in either of the discharging basins. The BMPs in place in each drainage and discussed in this document will help to manage water from fire fighting activities.

Discharges from Uncontaminated Groundwater or Spring Water

Periodic monitoring of groundwater wells requires that water be purged so that representative samples may be obtained. During purging activities this water is collected in a 55 gallon barrel and deposited in the refining wastewater system. While the intent is to capture all purged water, Bloomfield wishes to take advantage of the listing of this potential source in the event there is a discharge. Ground water wells may be located in the discharging basins at the Bloomfield Refinery. Low flows during pumping, roadways, berms, and native vegetation, all provide the BMPs necessary to control, and in some cases to contain, these discharges.

Fire Hydrant Flushings

Potable Water Including Water Line Flushing

Uncontaminated Air Conditioning or Compressor Condensate

Irrigation Drainage

Landscape Watering (*with exceptions*)

Pavement Wash Waters (*with exceptions*)

Routine External Building Wash Down

Any of these activities could occur within the Outfall 1 or 2 Basin or in a non-discharging basin and there may not be a discharge associated with the activity. Bloomfield, however, does want to take advantage of the listing of these potential sources. Existing

BMPs in the form of ponds and berms will contain or control the sort of discharges listed above.

Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility (not intentional discharge)

Bloomfield Refinery operates a cooling tower that may have incidental windblown mist that will probably not discharge out of the contained process basin. However, Bloomfield wishes to take advantage of the listing of this potential source as well.

4.9 Monitoring and Reporting Requirements

Water discharged from stormwater outfalls must be monitored on a quarterly basis. In this permit, only visual monitoring is required throughout the full term of the permit.

EPA recognizes that circumstances may exist that prevent an operator from performing visual monitoring during the required quarterly period. In the case of visual monitoring, documenting the conditions that prevented sample collection on the monitoring form is sufficient. Further discussion of these visual monitoring is provided below.

Quarterly Visual Monitoring Requirements

The MSGP requires visual monitoring of stormwater discharges from each designated sampling outfall on a quarterly basis. The MSGP allows the use of representative outfalls for visual and analytical monitoring. Bloomfield does not plan to use representative outfall monitoring, however in the future Bloomfield may choose to use this option. Monitoring must be conducted using grab samples collected during a "representative storm event⁷." The following visual observations must be documented.

color	floating solids	oil sheen
odor	settled solids	suspended solids
clarity	foam	other obvious indicators of stormwater pollution

Visual Monitoring Schedule – Refinery facilities must conduct visual monitoring for all five years of permit coverage. Visual monitoring will be performed quarterly in the following periods: October through December; January through March; April through June; and July through September.

Sample Collection – Samples must be collected from the stormwater outfalls listed following the procedures outlined in the Stormwater Sampling SOP (a copy is included in Attachment 6). Visual monitoring must be performed during daylight hours unless there is insufficient precipitation to produce a runoff event, in which case it can be performed outside of daylight hours. Visual monitoring must be conducted using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging.

⁷ A representative storm event is when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous storm event greater than 0.1 inch.

Visual Monitoring Waiver - If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, the following must be performed:

- document the reason for not performing the visual monitoring; and
- retain this documentation on-site with the visual monitoring records.

A form for recording the following visual monitoring requirements is provided in the Attachment 5. The following information must be included in the record:

- name of the person conducting the monitoring;
- location, date and time of the monitoring;
- field observations;
- other pertinent data (i.e., probable sources of any observed stormwater contamination); and
- adverse weather conditions (including drought) which preclude performing visual monitoring.

4.10 Threatened and Endangered (T&E) Species

Coverage under the MSGP is available only if stormwater discharges, allowable non-stormwater discharges, and discharge-related activities⁸ are not likely to jeopardize the continued existence of any species that are listed as threatened or endangered under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated or proposed to be designated as critical under the ESA.

The EPA has listed five criteria (A through E) that dischargers must meet one or more of for the entire term of the permit. Certification of eligibility and supporting documentation on the eligibility determination must also be included in this SWPPP.

The EPA's website at <http://cfpub.epa.gov/npdes/stormwater/endangerspecies.cfm> was checked. The portion of that list that applies to San Juan County New Mexico is listed below.

The lists examined identified federally listed or proposed U.S. species by State and County. The U.S. Fish and Wildlife Service Website states: "The County-by-County lists derived from this web site is based on information available to the U.S. Fish and Wildlife Service at the date of preparation. This list is subject to change, without notice, as new biological information is gathered and should NOT be used as the sole and final source for identifying species that may be impacted by a project. Please contact the appropriate field office(s) to get additional information." It has been updated through December 20, 2005. Species listed below with a status of both E and T are generally either endangered or threatened within the specified county. Designation of critical habitat (CH) does not mean that the county constitutes critical habitat, only that critical habitat has been designated for that species (see Addendum A Instructions of the Construction General Permit, or Addendum H instructions of the Multi-Sector Permit)." (Note: the EPA website has not been updated to reflect the change for the MSGP and in fact Addendum A appears to apply in both cases.)

⁸ Discharge related activities include activities which cause, contribute to, or result in stormwater point source pollutant discharges; and measures to control stormwater discharges included in this siting, construction and operation of best management practices (BMPs) to control, reduce or prevent stormwater pollution.

Inverse Name	Scientific Name	Status ⁹
BIRDS		
BALD EAGLE	Haliaeetus leucocephalus	T, AD
MEXICAN SPOTTED OWL	Strix occidentalis lucida	T
SOUTHWESTERN WILLOW FLYCATCHER	Empidonax traillii extimus	E
YELLOW-BILLED CUCKOO	Coccyzus americanus	C
MAMMALS		
BLACK-FOOTED FERRET	Mustela nigripes	E, EXPN
FISHES		
COLORADO PIKEMINNOW (SQUAWFISH)	Ptychocheilus lucius	E, EXPN
RAZORBACK SUCKER	Xyrauchen texanus	E
FLOWERING PLANTS		
KNOWLTON CACTUS	Pediocactus knowltonii	E
MANCOS MILK-VETCH	Astragalus humillimus	E
MESA VERDE CACTUS	Sclerocactus mesae-verdae	T

To comply with this certification requirement a discharger must meet one of the following five provisions:

Criteria A: No endangered or threatened species or critical habitat are in proximity to your facility or the point where authorized discharges reach the receiving water; or

Criteria B: In the course of separate federal action involving your facility formal or informal consultation with the Fish and Wildlife Service and/or National Marine Fisheries Service under section 7 of the ESA has been concluded and that consultation:

- a. Addressed the effects of your stormwater discharges, allowable non-stormwater discharges, and discharge related activities on listed species and critical habitat; and
- b. The consultation resulted in either a no jeopardy opinion or a written concurrence by the Service on a finding that your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities are not likely to adversely affect listed species or critical habitat; or

Criteria C: Your activities are authorized under section 10 of the ESA and that authorization addresses the effects of your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities on listed species and critical habitat; or

Criteria D: Using best judgment, you have evaluated the effects of your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities on listed endangered or threatened species and critical habitat and do not have reason to believe listed species or critical habitat would be adversely affected; or

⁹ T – Threatened, AD – Proposed Delisting, E- Endangered, EXPN – Non-Essential Experimental Population, C – Candidate Taxon, Ready for Proposal

Criteria E: Your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities were already addressed in another operator's certification of eligibility under Part 1.2.3.6.3.1 through 1.2.3.6.3.4 which included your facilities activities. By certifying eligibility under this Part, you agree to comply with any measures or controls upon which the other operator's certification was based.

Procedures for Complying with T&E Species Certifications

The MSGP includes procedures in Addendum A that must be followed in order for a discharger to certify compliance with Sections 1.2.3.6 and 4.5 of the MSG Permit. In following these procedures a discharger can be confident that "adverse affects" to T&E species have been avoided and they may certify in the NOI that the facility is in compliance with this requirement.

A summary of specific procedures to be followed is outlined below.

Step 1: Are there any Endangered Species or Critical Habitat in Your County and, if so, Are They in Proximity to Your Facility or Discharge Locations?

1. Check for listed species (table of species listed above), proceed to 2
2. Check for critical habitat, proceed to 3

Critical habitat for the Razorback Sucker exists in San Juan County, however habitat does not encompass, nor do the drainage areas approach, the area around Bloomfield.

3. Check for Proximity, proceed to 4

There are several species listed for San Juan County and one has critical habitat established, however the habitat comments listed below and the area in which the refinery is located are not similar and therefore, the proximity of the listed species is questionable.

Inverse Name	Habitat Comment	Proximity
BIRDS		
BALD EAGLE	Prefers bodies of water that reflect the primary food sources including fish and waterfowl. Preferentially roosts in pines, spruce, firs, cottonwoods, oaks, poplar and beech trees and they avoid areas with nearby human activities. Not listed in the specific watershed.	Not Expected
MEXICAN SPOTTED OWL	Mixed-conifer forests that have experienced minimal human disturbance, generally selected mature forests with canopy cover of 75%. See critical habitat map, Attachment 4.	Not Expected
SOUTHWESTERN WILLOW FLYCATCHER	Thickets, scrubby and brushy areas, open second growth, swamps, and open woodland (AOU 1983). Not listed in the specific watershed.	Not Expected

Inverse Name	Habitat Comment	Proximity
YELLOW-BILLED CUCKOO	Open woodland (especially where undergrowth is thick), parks, deciduous riparian woodland; in the West, nests in tall cottonwood and willow riparian woodland. Nests in deciduous woodlands, moist thickets, orchards, overgrown pastures; in tree, shrub, or vine, an average of 1-3 meters above ground (Harrison 1979).	Not Expected
MAMMALS		
BLACK-FOOTED FERRET	Limited to open habitat, the same habitat used by prairie dogs: grasslands, steppe, and shrub steppe. When inactive, occupies underground burrow made by prairie dog.	Not Expected – experimental populations not listed locally
FISHES		
COLORADO PIKEMINNOW (SQUAWFISH)	<p>Habitat is generally medium to large rivers. Young prefer small, quiet backwaters. Adults use various habitats, including deep turbid strongly flowing water, eddies, runs, flooded bottoms, or backwaters (especially during high flow). Lowlands inundated during spring high flow appear to be important habitats. Recorded mainly in shoreline habitat over sand (Tyus and McAda 1984). In winter, most common in shallow, ice-covered shoreline areas.</p> <p>Reproductively active adults seek faunally depauperate white-water canyons for deposition of gametes (Tyus 1991). Appears to select river canyons that receive freshwater input of groundwater from sandstone/limestone seeps (Tyus 1985). Young-of-year (postlarval) occupy shallow, alongshore, ephemeral backwaters formed in late summer by receding water levels (Tyus 1991). Juveniles tend to occur downstream from area occupied by adults, though larger juveniles are not uncommon in shoreline habitats similar to those occupied by adults (Tyus 1991).</p>	Not Expected – San Juan is fairly well channeled through this area around Farmington and Bloomfield and is not specifically consistent with the habitat listed

Inverse Name	Habitat Comment	Proximity
RAZORBACK SUCKER	<p>Habitats include slow areas, backwaters, and eddies of medium to large rivers; impoundments. Often associated with sand, mud, and rock substrate in areas with sparse aquatic vegetation, where temperatures are moderate to warm. Hatchery-reared suckers released into the San Juan River inflow of Lake Powell most often used shallowly flooded stands of salt cedar and, in some cases, cobbled shorelines. Limited data indicate that young tend to remain along shorelines, in embayments along sandbars, or in tributary mouths.</p> <p>Spawns most commonly near shore in water less than 0.6 m deep; known and suspected spawning sites are in broad, flat-water segments. Spawns in streams over silty sand, gravel, or rock substrate at depths of about 1-20 ft. Ripe individuals often have been taken over or near coarse sand, or gravel or cobble bars, in flowing water.</p>	<p>Not Expected – Critical habitat is not consistent with this area and was located approximately 32 miles from the site</p>
FLOWERING PLANTS		
KNOWLTON CACTUS	<p>Tertiary alluvial deposits that have formed gravelly, dark, sandy loams on slopes or hills. Found under the shade of trees and shrubs and in open areas in dry pinyon-juniper woodlands at 1800-2000 m elevation.</p>	<p>Not Expected – Habitat is not consistent with site conditions</p>
MANCOS MILK VETCH	<p>Sandstone ledges or mesa tops, often in cracks in the sandstone substrate or in shallow pockets of sandy soil. On sandstone of Cretaceous origin in the Mesa Verde series. Exfoliating Lookout Point Sandstone. Possibly also on limestone. Approximately 1695 m.</p>	<p>Not Expected – Habitat is not consistent with site conditions</p>
MESA VERDE CACTUS	<p>Dry low exposed hills and mesas in full sun of Mancos or Fruitland clays in the desert at about 1200-2000 m elevation. Cracks in the clay soil, where the seeds fall and may germinate, are apparently an important part of the plant's microhabitat. Soils are typically high in selenite. A common associate is Nuttall saltbush (<i>Atriplex nuttallii</i>).</p>	<p>Not Expected – Habitat is not consistent with site conditions</p>

4. Check for Criteria "A" Eligibility

If no species were listed for your county or the species that were listed were not in proximity to your discharge and your facility and discharge locations were not in proximity to critical habitat, you are eligible under Criteria "A".

Criteria A is not applicable for Bloomfield because, while species may be listed for the county, the discharge locations may be in proximity to critical habitat.

Step 2: Can You Meet Eligibility Criteria "B", "C", or "E"?

1. Check for Criteria "B", "C", or "E" Basis
 - There was a completed consultation under ESA § 7 for your facility, proceed to 2
 - There is a previously issued ESA § 10 permit for your facility, proceed to 3
 - Another operator previously certified eligibility for the area where your facility is located, proceed to 4
2. Did ESA consultation result in a "no jeopardy" opinion by the Service or a concurrence by the service that your activities would be "unlikely to adversely affect" listed species or critical habitat? If no, proceed to Step 3
3. If your ESA § 10 permit considered all currently listed species and critical habitat and addresses your stormwater, allowable non-stormwater, and discharge related activities, you are eligible under Criteria "C". If not, proceed to Step 3
4. Did the other operator's certification of eligibility consider all currently listed species and critical habitat and address your stormwater, allowable non-stormwater and discharge related activities? If no, proceed to Step 3

Step 3: Are Listed Species or Critical Habitat Likely To Be Adversely Affected by Your Facility's Stormwater Discharges, Allowable Non-stormwater Discharges, or Discharge Related Activities?

If you are unable to certify eligibility under Criteria A, B, C, or E, you must assess whether your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities¹⁰ are likely to pose jeopardy¹¹ to listed species or critical habitat.

Document the results of your assessment and make a preliminary determination on whether or not there would likely be any jeopardy to listed species or critical habitat. You will need to determine that your activities are either "unlikely to adversely affect" or "may adversely affect." Your determination may be based on measures that you implement to avoid, eliminate, or minimize adverse affects. Proceed to step 4.

Step 4: Can You Meet Eligibility Criteria "D"?

Using best judgment, can you determine that your facility's stormwater discharges, allowable non-stormwater discharges, and discharge-related activities are unlikely to pose jeopardy to listed species or critical habitat?

¹⁰ Stormwater discharge-related activities include: activities which cause, contribute to, or result in point source stormwater pollutant discharges; and measures to control stormwater discharges and allowable non-stormwater discharges including the siting, construction, operation of best management practices (BMPs) to control, reduce or prevent water pollution. [emphasis added]

¹¹ Effects from stormwater discharges, allowable non-stormwater discharges, and discharge-related activities which could pose jeopardy include: Hydrological (wastewater or stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH), Habitat (excavation, site development, grading, and other surface disturbance activities, including the installation or placement of wastewater or stormwater ponds or BMPs may adversely affect listed species or their habitat), Toxicity (pollutants in wastewater or stormwater may have toxic effects on listed species.)

1. If Step 3 determination is "unlikely to adversely affect," you are eligible under Criteria "D". Incorporate the appropriate measures upon which your eligibility was based into your Stormwater Pollution Prevention Plan and certify eligibility under Part 1.2.3.6.3.4 of the permit. Proceed to Step 5. If not, go to 2.
2. If Step 3 determination is "may adversely affect" you must contact the Service(s) to discuss your findings and measures you could implement to avoid, eliminate, or minimize adverse affects. If you and the Service(s) reach agreement you are eligible under Criteria D. Proceed to Step 5. If not, go to 3.
3. If endangered species issues cannot be resolved, you are not eligible for coverage under the MSGP and must apply for an individual permit.

Step 5: Submit Notice of Intent and Document Results of the Eligibility Determination

Once eligibility requirements have been met, you may submit the NOI. Signature and submittal is deemed to constitute your certification, under penalty of law, of your eligibility for permit coverage. You must include documentation of Part 1.2.3.6 eligibility in the SWPPP as follows:

Criteria A - A copy of the County-Species List pages with the county(ies) where your facility and discharges are located and a statement on how you determined that no listed species or critical habitat was in proximity to your discharge.

Criteria B - A copy of the Service(s)'s Biological Opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA § 7 consultation.

Criteria C - A copy of the Service(s)'s letter transmitting the ESA § 10 authorization.

Criteria D - Documentation on how you determined adverse effects on listed species and critical habitat were unlikely.

Criteria E - A copy of the documents originally used by the other operator of your facility (or area including your facility) to satisfy the documentation requirement of Criteria A, B, C, or D.

Following the Steps listed above, Bloomfield has determined that Criteria D will apply. Documentation of the steps follows as does the required documentation.

Step 1: Are there any Endangered Species or Critical Habitat in Your County and, if so, are They in Proximity to Your Facility or Discharge Locations?

Inverse Name	Proximity
BALD EAGLE	Not Expected – habitat and site conditions not consistent
MEXICAN SPOTTED OWL	Not Expected – critical habitat excludes plant area
SOUTHWESTERN WILLOW FLYCATCHER	Not Expected – specific watershed not within area designated for occupancy
YELLOW-BILLED CUCKOO	Not Expected – habitat and site conditions not consistent
BLACK-FOOTED FERRET	Not Expected – experimental populations not listed locally

Inverse Name	Proximity
COLORADO PIKEMINNOW (SQUAWFISH)	Not Expected – San Juan characteristics are not consistent with the habitat listed
RAZORBACK SUCKER	Not Expected – Critical habitat is listed 32 miles from the site and is not consistent with site conditions
KNOWLTON CACTUS	Not Expected – Habitat is not consistent with site conditions
MANCOS MILK VETCH	Not Expected – Habitat is not consistent with site conditions
MESA VERDE CACTUS	Not Expected – Habitat is not consistent with site conditions

Step 2: Can You Meet Eligibility Criteria "B", "C", or "E"?
 Giant Industries – Bloomfield Refinery cannot meet the criteria.

Step 3: Are Listed Species or Critical Habitat Likely To Be Adversely Affected by Your Facility's Stormwater Discharges, Allowable Non-stormwater Discharges, or Discharge Related Activities?
 Bloomfield evaluated the species that were in proximity to the facility stormwater discharges, allowable non-stormwater discharges and discharge related activities and based on previous studies, habitat, and potential to cause jeopardy, Bloomfield has determined the following:

Listed Species	Jeopardy	Rationale
BIRDS		
BALD EAGLE	No	2,3,5
MEXICAN SPOTTED OWL	No	1,2,3,4,5
SOUTHWESTERN WILLOW FLYCATCHER	No	1,2,3,4,5
YELLOW-BILLED CUCKOO	No	2,3,5
MAMMALS		
BLACK-FOOTED FERRET	No	2,3,5
FISHES		
COLORADO PIKEMINNOW (SQUAWFISH)	No	1,2,4,5
RAZORBACK SUCKER	No	1,2,3,4,5
FLOWERING PLANTS		
KNOWLTON CACTUS	No	1,2,4,5
MANCOS MILK-VETCH	No	1,2,4,5
MESA VERDE CACTUS	No	1,2,4,5

1. Major concern for runoff is sediment which is a naturally occurring phenomenon in New Mexico.
2. Runoff volume from basins has remained virtually unchanged for the past 5 years, however sampling has shown that quality has improved.

3. Critical habitat, habitat definitions, or listed distributions in watersheds exclude the refinery area.
4. There are no stormwater discharge-related activities that cause, contribute to or result in a point source stormwater pollutant discharge in the proximity of any of these species.
5. There are minimal discharge locations at Bloomfield, none of which contain "discharge related activities" that could adversely impact endangered species or designated critical habitat.

Careful study of the available literature and reference to the New Mexico Game and Fish Department data files, indicated that additionally one amphibian, twenty-one birds, five bat, four mammals, and one insect are viewed as sensitive or species of concern. Only one of these additional species is listed as endangered or threatened:

- Gray Vireo

It is evident that the Bloomfield Refinery can meet the certification requirements in Criteria D and submit the NOI.

- Critical habitat listed for the Razorback Sucker are outside of the area of the refinery or its discharge.
- BMPs constructed at outfalls and areas in proximity to the outfalls are located outside of riparian habitat where an endangered or threatened species would be expected to exist.
- The receiving water for stormwater discharges is a normally dry channel that does not support aquatic life, or riparian habitat. This channel is a tributary to the San Juan.

4.11 Historic Places

The MSGP requires applicants to determine whether their facility's stormwater discharges, allowable non-stormwater discharges, or construction of best management practices to control such discharges, has potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places. The following three scenarios describe how applicants can meet the permit eligibility criteria for protection of historic properties under this permit:

1. If historic properties are not identified in the path of a facility's stormwater and allowable non-stormwater discharges or where construction activities are planned to install BMPs to control such discharges, then the applicant has met the permit eligibility criteria under Part 1.2.3.7.1.
2. If historic properties are identified but it is determined that they will not be affected by the discharges or construction of BMPs to control the discharge, the applicant has met the permit eligibility criteria under Part 1.2.3.7.1.
3. If historic properties are identified in the path of a facility's stormwater and allowable non-stormwater discharges or where construction activities are planned to install BMPs to control such discharges, and it is determined that there is potential to adversely affect the property, the applicant can still meet the permit eligibility criteria under Part 1.2.3.7.2 if they obtain and comply with a written agreement with the appropriate State or Tribal Historic Preservation Officer which

outlines measures the applicant will follow to mitigate or prevent those adverse effects¹².

Historic properties have not been identified in the areas of stormwater or allowable non-stormwater discharges or BMPs at Bloomfield Refinery, therefore certification and coverage under the eligibility criteria in Part 1.2.3.7.1 is available at this site.

4.12 Comprehensive Site Compliance Evaluation

The MSGP Section 4.9.1 requires that facility inspections must be conducted at least annually by qualified personnel. Bloomfield personnel will perform this comprehensive site inspection annually and it will include the following areas:

1. Industrial materials, residue or trash that could contaminate or be washed away in stormwater,
2. Leaks or spills from industrial equipment, drums, barrels, tanks or similar containers,
3. Offsite tracking of industrial materials or sediment where vehicles enter or exit the site,
4. Tracking or blowing of raw, final, or waste materials from areas or no exposure to exposed areas,
5. Evidence of, or the potential for, pollutants entering the drainage system,
6. Results of visual monitoring must also be taken into consideration, and
7. Finally BMPs and their effectiveness must be evaluated to ensure they are operating effectively.

Based on the results of the inspections, the SWPPP will be modified as necessary within 14 calendar days following the inspection. If modifications to existing BMPs are required or if new BMPs need to be implemented, the changes must take place prior to the next rain event but not more than 12 weeks following the completion of the evaluation.

A report summarizing the scope, the name of the personnel, and the date of the inspection as well as major observations relating to the implementation of the SWPPP must be completed and retained in the SWPPP for at least three years from the date permit coverage expires or is terminated. Major observations should include:

- Location(s) of the discharges of pollutants from the site,
- Location(s) of the BMPs that need to be maintained,
- Location(s) of the BMPs that failed to operate as designed or proved inadequate for a particular location, and
- Location(s) where additional BMPs are needed that did not exist at the time of inspection.

Record of actions taken as part of the SWPPP must be retained for at least three years from the date that permit coverage expires or is terminated. The inspection reports must

¹² Adverse Effects includes but is not limited to damage, deterioration, alteration, or destruction of the historic property or place.

identify any incidents of non-compliance. Where an inspection report does not identify any incidents of non-compliance, the report must contain a certification that the facility is in compliance with the SWPPP and the MSGP. Both the inspection report and any reports of follow-up actions must be signed in accordance with the provisions of this permit.

A form generated for use in documenting compliance with this portion of the SWPPP is in Appendix 5.

4.13 Updating the SWPPP

The SWPPP will be amended whenever there is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge or potential for discharge of pollutants. Also, if the SWPPP is determined to be ineffective in eliminating or significantly minimizing pollutants from the sources identified in this plan, or if it is determined that it is otherwise not achieving the general objectives of controlling pollutants in discharge from the facility, it will be amended. Revisions to the SWPPP are contained in Attachment 6 and upgrades to the stormwater system are contained in Attachment 7.

These amendments will be made and revisions noted in Attachment 6 within 12 weeks of the change.

5.0 Monitoring and BMP Inspection Procedures

This section includes facility inspection and monitoring schedules and provides guidance for completing field monitoring and inspection forms.

5.1 Inspection and Monitoring Schedules

BMP Inspection Table summarizes the inspection schedule for structural Best Management Practices (BMPs) used to control the flow of stormwater throughout the facility and at the stormwater discharge outfalls. The SWPPP BMP section provides specific details on the Monthly and Annual inspection requirements.

BMP Inspection Schedule

Inspection Item	Weekly	Monthly	Annual
Stormwater Outfalls (shown on Figure 2 with an "Outfall 1" or "Outfall 2" designation)	✓		
Check Ponds, Rip-Rap, Stormwater Barriers and other Sediment Control Systems	✓		
Road Berms, Culverts, Flow Outlets, and Other Stormwater Flow or Diversion Controls		✓	
Significant Materials Storage and Handling Areas (in areas that drain to stormwater)		✓	
TRI Chemicals Storage and Handling Areas (in areas that drain to stormwater)		✓	
Comprehensive Site Compliance Evaluation			✓

The Outfall Water Monitoring Schedule Table summarizes the monitoring requirements for each stormwater outfall during the five-year duration of the MSGP. The SWPPP provides additional information on visual monitoring requirements and

provide specific details concerning analytical monitoring during the second and fourth years of permit coverage.

Outfall Water Monitoring Schedule

	Quarterly Storm Event Monitoring									
	January 2001- October 2001		October 2001- 2002		October 2002-2003		October 2003-2004		October 2004-2005	
	Year 1		Year 2		Year 3		Year 4		Year 5	
	Visual ¹³	Analytical ¹⁴	Visual	Analytical	Visual	Analytical	Visual	Analytical	Visual	Analytical
Outfall 1	✓		✓		✓		✓		✓	
Outfall 2	✓		✓		✓		✓		✓	

5.2 Inspection and Monitoring Forms

A description of the inspection and monitoring forms included in Attachment 5 of this plan is provided below.

BMP Inspection Form:

These forms are used for the **monthly and weekly** inspection of structural BMPs (i.e., outfalls, drainage channels, diversions, etc.). A separate form is provided in Appendix 5 for each stormwater basin with BMPs. The forms for the discharging basins must be filled out during the inspections and filed in the SWPPP file upon completion of the inspection task. In addition, a general form has been included for plant site inspections to ensure no non-stormwater discharged or unexpected activities are taking place. This form should be filled out monthly and filed quarterly in the SWPPP file.

Annual Site Compliance Inspection Form:

The annual site compliance inspection form must be completed once per year, and at the same time that the coinciding weekly and monthly BMP inspection forms are being completed. Only one form needs to be completed for stormwater basins throughout the entire refinery site. If no issues or problems are identified during the inspection, then attaching copies of the BMP inspection forms to the annual site compliance form will be sufficient to verify facility compliance. If problems are noted during the annual compliance inspection, then refer to the SWPPP for further instructions. Note that a thorough knowledge of basin descriptions provided in the SWPPP is required prior to conducting the annual compliance inspection. Therefore, the inspector must review the SWPPP prior to performing the annual compliance inspection. Completed forms must be filed in the SWPPP file upon completion of the inspection task.

¹⁰ ibid

¹³ See SWPPP Quarterly Visual Monitoring Requirements

¹⁴ See SWPPP Quarterly Analytical Monitoring Requirements - Analytical Monitoring is not required for Sector I facilities.

Quarterly Visual Monitoring Form:

A separate quarterly visual monitoring form must be completed for Outfalls 1 and 2 made during representative storm events¹⁰. If no sample can be collected during the quarter for one or more of the two outfalls, a section is provided on the form for explaining why not. Completed forms must be filed in the SWPPP file.

6.0 Reporting Procedures

Two types of reporting are required under this SWPPP: 1) reporting of results from the analytical monitoring, and 2) reporting of spills and releases of hazardous substances. Procedures for reporting under these two requirements are provided below.

6.1 Analytical Reporting

The MSGP does not require analytical monitoring or reporting for the Sector I – Oil and Gas Extraction and Refining.

6.2 Additional Reporting Requirement

The MSGP also requires that along with the results of monitoring that the following information be reported:

- the date and duration (in hours) of the storm event(s) samples;
- rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff;
- the duration between the stormwater samples and the end of the previous measurable storm event; and
- an estimate of the total volume (in gallons) of the discharge samples.

This information is recorded directly on the DMRs as well as on the forms provided in Appendix 5. However, because analytical monitoring is not required the additional reporting requirement is not applicable and the information is only recorded on the visual monitoring forms.

7.0 Document Management

7.1 Document Retention

In addition to the specific records that are mentioned in the SWPPP, the MSGP requires that copies of the SWPPP and all reports and certifications required by the MSGP as well as records of all data used to complete the NOI to be covered by this permit be maintained for a period of at least three years from the date coverage under this permit expires or is terminated. This period may be extended by request of the Director at any time.

7.2 Document Accessibility

A copy of the SWPPP required by the MSGP as well as a copy of the MSGP must be retained at the facility from the date of permit coverage to the date permit coverage ceases. A copy of this SWPPP must be made available to the public if requested to

¹⁰ Ibid.

do so in writing. The procedure for making this document available has been set up in the document management system and this procedure will be followed to ensure the latest copy is provided to the public.

7.3 Addresses

Written correspondence concerning discharges covered under this permit and directed to the EPA must be sent to appropriate address listed below:

Notice of Intent (NOI)

Stormwater Notice of Intent (4203)
United States Environmental Protection Agency
1200 Pennsylvania Avenue
Washington, DC 20460

Notice of Termination (NOT)

Stormwater Notice of Intent (4203)
401 M Street, S.W.
Washington, DC 20460

DMRs and Other Written Communications (as required)

United States EPA, Region 6
Stormwater Staff
Enforcement and Compliance Assurance Division (GEN-WC)
EPA SW MSGP
P.O. Box 50625
Dallas, TX 75205

New Mexico – Program Manager
Point Source Regulation Section
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

8.0 Signatory Requirements

All Notices of Intent, Notices of Termination, Swap's, reports, certifications, or information either submitted to the Director or that this permit requires be maintained must be signed as follows.

8.1 For a Corporation

By a responsible corporate officer who for this document is a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation. It can also be the manager of one or more manufacturing, production, or operating facilities provided that manager is authorized to make management decisions which govern the operation of the regulated facility including having the duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations. The manager can ensure that the necessary systems are established or actions taken to gather complete and

accurate information for permit application requirements and where authority has been assigned or delegated to the manager in accordance with corporate procedures.

For the purposes of this SWPPP under the MSGP, the General Manager would be the appropriate person to sign any necessary documents.

8.2 Stormwater Pollution Prevention Plan Certification

The following certifications and signatory requirements are presented below:

SWPPP Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

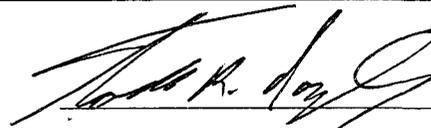
Certification of Discharge Testing (as described in Section 4.7):

This facility has been evaluated for the presence of, or potential for, unauthorized non-stormwater discharges to its stormwater conveyance systems. Based on this evaluation, the facility does not have any non-stormwater discharges to its stormwater conveyance systems.

Authorized Signature

7/19/07

Date



Todd Doyle

Name of Authorized Representative

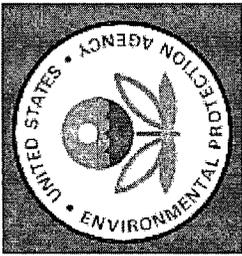
General Manager

Title

Attachment 1

NOI

Transmittal of Permit Number from EPA



U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STORM WATER NOTICE OF INTENT CENTER



NMR05B159

Dear Operator:

06-24-2002

The EPA has processed your Notice of Intent (NOI) application for the facility noted below. **This facility is authorized to discharge storm water associated with multi-sector activity under the terms and conditions imposed by the EPA's NPDES Storm Water Multi-Sector Permit.** The facility permit number is listed above and the active date of permit coverage is 05-05-2002.

EPA's multi-sector permit requires certain pollution prevention and control measures, possible monitoring and reporting, and annual inspections. Among the conditions and requirements of this permit, you must prepare and implement a pollution prevention plan (PPP) that is tailored to your industrial site. You may also be required to submit monitoring data for your facility's storm water discharges. As a facility authorized to discharge under this storm water multi-sector permit, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

FACILITY:

GIANT REFINING --- BLOOMFIELD
#50 CR 4990
BLOOMFIELD, NM
87413

OPERATOR:

SAN JUAN REFINING COMPANY
#50 CR 4990
BLOOMFIELD, NM
87413

You can obtain a copy of the EPA's storm water multi-sector permit, which contains the terms and conditions to which you are now held accountable, from the following website: <http://www.epa.gov/earth1r6/6en/w/sw/msgp2000.pdf>. If you have general questions concerning the storm water program, please call the EPA Region 06 contact: **Brent Larsen, (214) 665-7523**. If you have questions about this form, contact the Notice of Intent Center at (866) 352-7755.



Storm Water NOI (4203M)
USEPA
1200 Pennsylvania Avenue
Washington, D.C.
20460

October 17, 2002

EPA Processing Center,

Our previous Environmental Manager (Barry Holman) sent an NOI dated May 3, 2002. He inadvertently signed Section D signifying that he was the authorized, responsible individual for our Storm Water Pollution Prevention Plan. I am sending a new NOI that is properly signed by our Refinery Manager, Chad King. I apologize for any inconvenience this may cause and look forward to receiving confirmation of a NPDES Storm Water Multi-Sector Permit.

Sincerely

A handwritten signature in cursive script that reads "Cindy Hurtado".

Cindy Hurtado
Environmental Assistant
Giant Refining---Bloomfield
#50 CR 4990
Bloomfield, NM
87413

PHONE
505-632-8013
FAX
505-632-3911

50 ROAD 4990
P.O. BOX 159
BLOOMFIELD
NEW MEXICO
87413

NPDES Form 3510-6	United States Environmental Protection Agency Washington, DC 20460	Form Approved OMB No. 2040-0086																														
Notice of Intent for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY Under the Multi-sector NPDES General Permit																																
Submission of this completed Notice of Intent (NOI) constitutes notice that the entity in Section B intends to be authorized to discharge pollutants to waters of the United States, from the facility or site identified in Section C, under EPA's Storm Water Multi-sector General Permit (MSGP). Submission of the NOI also constitutes notice that the party identified in Section B of this form has read, understands, and meets the eligibility conditions of Part I of the MSGP; agrees to comply with all applicable terms and conditions of the MSGP; understands that continued authorization under the MSGP is contingent on maintaining eligibility for coverage, and that implementation of the permittee's pollution prevention plan is required two days after a complete NOI is mailed. In order to be granted coverage, all information required on this form must be completed. Please read and make sure you comply with all permit requirements, including the requirement to prepare and implement a storm water pollution prevention plan.																																
A. Permit Selection If new, enter generic permit, otherwise enter previous permit: <u>NM R05A641</u>		New Permit Number (EPA Use Only) <input type="checkbox"/> R05 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																														
B. Facility Operator Information 1. Name: <u>San Juan Refining Company</u> 2. Phone: <u>505 632-8013</u> 3. Mailing Address: a. Street or P.O. Box: <u>#50 CR 4990</u> b. City: <u>Bloomfield</u> c. State: <u>NM</u> d. Zip Code: <u>87413</u>																																
C. Facility/Site Information 1. Facility/Site Name: <u>Giant Refining - Bloomfield</u> 2. Location Address: a. Street: <u>#50 CR 4990</u> b. City: <u>Bloomfield</u> c. County: <u>San Juan</u> d. State: <u>NM</u> e. Zip Code: <u>87413</u> f. Latitude: <u>36 41 50</u> g. Longitude: <u>107 58 20</u> 3. If you are filing as a co-permittee, enter storm water general permit number: _____ 4.a. Permit Applicant: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Private <input type="checkbox"/> Other public entity b. Is the facility located on Indian Country Lands? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 5. Does the facility discharge storm water into: a. Receiving water(s)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, name(s) of receiving water(s): _____ b. A municipal separate storm sewer system (MS4)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, name of the MS4 operator: _____ 6. The 4-digit Standard Industrial Classification (SIC) codes or the 2-letter Activity Codes that best represent the principal products produced or services rendered by your facility and major co-located activities: Primary: <u>2911</u> Secondary (if applicable): _____ 7. Applicable sector(s) of industrial activity, as designated in Part 1.2.1 of the MSGP, that include associated discharges that you seek to have covered under this permit (choose up to three): <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> Sector A</td> <td><input type="checkbox"/> Sector F</td> <td><input type="checkbox"/> Sector K</td> <td><input type="checkbox"/> Sector P</td> <td><input type="checkbox"/> Sector U</td> <td><input type="checkbox"/> Sector Z</td> </tr> <tr> <td><input type="checkbox"/> Sector B</td> <td><input type="checkbox"/> Sector G</td> <td><input type="checkbox"/> Sector L</td> <td><input type="checkbox"/> Sector Q</td> <td><input type="checkbox"/> Sector V</td> <td><input type="checkbox"/> Sector AA</td> </tr> <tr> <td><input type="checkbox"/> Sector C</td> <td><input type="checkbox"/> Sector H</td> <td><input type="checkbox"/> Sector M</td> <td><input type="checkbox"/> Sector R</td> <td><input type="checkbox"/> Sector W</td> <td><input type="checkbox"/> Sector AB</td> </tr> <tr> <td><input type="checkbox"/> Sector D</td> <td><input checked="" type="checkbox"/> Sector I</td> <td><input type="checkbox"/> Sector N</td> <td><input type="checkbox"/> Sector S</td> <td><input type="checkbox"/> Sector X</td> <td><input type="checkbox"/> Sector AC</td> </tr> <tr> <td><input type="checkbox"/> Sector E</td> <td><input type="checkbox"/> Sector J</td> <td><input type="checkbox"/> Sector O</td> <td><input type="checkbox"/> Sector T</td> <td><input type="checkbox"/> Sector Y</td> <td><input type="checkbox"/> Sector AD</td> </tr> </table> 8. Additional Facility/Site Requirements: a. Based on the instructions provided in Addendum A of the MSGP, have the eligibility criteria for "listed species" and critical habitat been met? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No b. Based on the instructions provided in Addendum B of the MSGP, have the eligibility criteria for protection of historic properties been met? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Sector A	<input type="checkbox"/> Sector F	<input type="checkbox"/> Sector K	<input type="checkbox"/> Sector P	<input type="checkbox"/> Sector U	<input type="checkbox"/> Sector Z	<input type="checkbox"/> Sector B	<input type="checkbox"/> Sector G	<input type="checkbox"/> Sector L	<input type="checkbox"/> Sector Q	<input type="checkbox"/> Sector V	<input type="checkbox"/> Sector AA	<input type="checkbox"/> Sector C	<input type="checkbox"/> Sector H	<input type="checkbox"/> Sector M	<input type="checkbox"/> Sector R	<input type="checkbox"/> Sector W	<input type="checkbox"/> Sector AB	<input type="checkbox"/> Sector D	<input checked="" type="checkbox"/> Sector I	<input type="checkbox"/> Sector N	<input type="checkbox"/> Sector S	<input type="checkbox"/> Sector X	<input type="checkbox"/> Sector AC	<input type="checkbox"/> Sector E	<input type="checkbox"/> Sector J	<input type="checkbox"/> Sector O	<input type="checkbox"/> Sector T	<input type="checkbox"/> Sector Y	<input type="checkbox"/> Sector AD
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<input type="checkbox"/> Sector E	<input type="checkbox"/> Sector J	<input type="checkbox"/> Sector O	<input type="checkbox"/> Sector T	<input type="checkbox"/> Sector Y	<input type="checkbox"/> Sector AD																											
D. Certification Do you certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted? Based on your inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, do you certify that the information submitted is, to the best of your knowledge and belief, true, accurate, and complete? Do you certify that you are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations? Print Name: <u>Chad King</u> Signature: <u><i>Chad King</i></u> Date: <u>10/16/02</u>																																



**Notice of Intent for Storm Water Discharges Associated with
INDUSTRIAL ACTIVITY Under the Multi-sector NPDES General Permit**

Submission of this completed Notice of Intent (NOI) constitutes notice that the entity in Section B intends to be authorized to discharge pollutants to waters of the United States, from the facility or site identified in Section C, under EPA's Storm Water Multi-sector General Permit (MSGP). Submission of the NOI also constitutes notice that the party identified in Section B of this form has read, understands, and meets the eligibility conditions of Part I of the MSGP; agrees to comply with all applicable terms and conditions of the MSGP; understands that continued authorization under the MSGP is contingent on maintaining eligibility for coverage, and that implementation of the permittee's pollution prevention plan is required two days after a complete NOI is mailed. In order to be granted coverage, all information required on this form must be completed. Please read and make sure you comply with all permit requirements, including the requirement to prepare and implement a storm water pollution prevention plan.

A. Permit Selection
Permit number assigned to your facility under the previous permit: NM R05A641 New Permit Number (EPA Use Only) R05

B. Facility Operator Information
1. Name: San Juan Refining Company 2. Phone: 505-632-8013
3. Mailing Address: a. Street or P.O. Box: #50 CR 4990
b. City: Bloomfield c. State: NM d. Zip Code: 87413

C. Facility/Site Information
1. Facility/Site Name: Giant Refining - Bloomfield
2. Location Address: a. Street: #50 CR 4990
b. City: Bloomfield c. County: San Juan
d. State: NM e. Zip Code: 87413
3. a. Latitude: 36° 41' 50" b. Longitude: 107° 58' 20"
4. a. Permit Applicant: Federal State Tribal Private Other public entity
b. Is the facility located on Indian Country Lands? Yes No
5. Does the facility discharge storm water into:
a. Receiving water(s)? Yes No If yes, name(s) of receiving water(s): _____
b. A municipal separate storm sewer system (MS4)? Yes No
If yes, name of the MS4 operator: _____
6. The 4-digit Standard Industrial Classification (SIC) codes or the 2-letter Activity Codes that best represent the principal products produced or services rendered by your facility and major co-located activities:
Primary: 2611 Secondary (if applicable): _____

7. Applicable sector(s) of industrial activity, as designated in Part 1.2.1 of the MSGP, that include associated discharges that you seek to have covered under this permit (choose up to three):
 Sector A Sector F Sector K Sector P Sector U Sector Z
 Sector B Sector G Sector L Sector Q Sector V Sector AA
 Sector C Sector H Sector M Sector R Sector W Sector AB
 Sector D Sector I Sector N Sector S Sector X Sector AC
 Sector E Sector J Sector O Sector T Sector Y Sector AD
8. Additional Facility/Site Requirements:
a. Based on the instructions provided in Addendum A of the MSGP, have the eligibility criteria for "listed species" and critical habitat been met? Yes No
b. Based on the instructions provided in Addendum B of the MSGP, have the eligibility criteria for protection of historic properties been met? Yes No

D. Certification
Do you certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted? Based on your inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, do you certify that the information submitted is, to the best of your knowledge and belief, true, accurate, and complete? Do you certify that you are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations?
Print Name: BARRY G. HOLMAN CHAD KING
Signature: [Signature] Date: 01/30/02

Instructions for Completing the Notice of Intent for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY Under the Multi-sector General Permit

Who Must File a Notice of Intent?

Under the provisions of section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122, Federal law prohibits "point source" discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. If you operate a facility which is described in Part 1.2.1. of the Multi-sector General Permit (MSGP) or if you have been designated as needing permit coverage for your storm water discharges by your NPDES permitting authority, and you meet the eligibility requirements in Part 1 of the permit, you may satisfy your CWA obligation for permit coverage by submitting a completed NOI to obtain coverage under the MSGP. If you have questions about whether you need a permit under the NPDES Storm Water Program, contact your NPDES permitting authority (i.e., your EPA Regional storm water coordinator or your State water pollution control agency).

One NOI must be submitted for each facility or site for which you are seeking permit coverage. Only one NOI need be submitted to apply for coverage for all of your activities at each facility (e.g., you do not need to submit a separate NOI for each type of industrial activity located at a facility or industrial complex, provided your storm water pollution prevention plan covers each area for which you are an operator). Finally, the NOI must be submitted in accordance with the deadlines established in Part 2.1 of the MSGP.

When to File the NOI Form

DO NOT FILE THE NOI UNTIL YOU HAVE OBTAINED A COPY OF THE MULTI-SECTOR GENERAL PERMIT. You will need it to determine your eligibility, prepare your storm water pollution prevention plan, and correctly answer all questions on the NOI form — all of which must be done before you can sign the certification statement on the NOI in good faith (and without risk of committing perjury).

If you have a new facility or are the new operator of an existing facility, this form must be postmarked at least 48 hours before you need permit coverage. If your facility was covered under the 1995 Multi-sector General Permit or if you are currently operating without a permit, see Part 2.1 of the MSGP for your deadlines. CAUTION: You must allow enough lead time to gather the information necessary to complete the NOI (especially that related to determining eligibility with regards to endangered species and historic properties) and prepare the pollution prevention plan required by Part 4 of the MSGP prior to submitting your NOI.

Where to File the NOI Form

NOIs must be sent to the following address (do not send Storm Water Pollution Prevention Plans (SWPPPs) to this address):

Storm Water Notice of Intent (4203)
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

(For overnight/express delivery of NOIs, add the phone number (202) 260-9541)

NOTE: While not currently available, EPA is exploring the possibility of offering the option to complete the NOI form electronically online via the Internet. If this option does become available, directions will be posted on EPA's web site. To check on the availability of the alternative Online NOI, please visit <http://www.epa.gov/owm/sw>. If the Online NOI is not available, you must file the NOI at the above address.

If your facility discharges through a municipal separate storm sewer system (MS4) that is permitted as a medium or large MS4 under the NPDES Storm Water Program, you must also submit a signed copy of the NOI to the operator of that MS4, in accordance with the deadlines established in Part 2.1 of the permit.

Completing the NOI Form

To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the address above.

Section A. Permit Selection

You must indicate the NPDES storm water general permit under which you are applying for coverage. Find the generic permit "number" in Part 1.1 of the permit that covers the area where your facility is located. For example, if you are located in New Mexico (except Indian Country lands), the generic number would be NMR05###. If you are located on Navajo lands in New Mexico, the generic permit number would be AZR05*##1. CAUTION: You must use the correct permit number or your permit coverage will be invalid since you are not located within the coverage area for that permit.

Section B. Facility Operator Information

1. Provide the legal name of the person, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or other legal entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager.
2. Provide the telephone number of the facility operator.
3. Provide the mailing address of the facility operator. Include the street address or P.O. Box, city, state, and zip code. All correspondence regarding the permit will be sent to this address, not the facility address in Section C.
4. Indicate the legal status of the facility operator as a Federal, State, Tribal private, or other public entity (other than Federal or State). This refers only to the operator, not the owner or the land the facility or site is located upon.

Section C. Facility/Site Information

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city county, state, and zip code. Do not use a P.O. Box.
3. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from U.S. Geological Survey (USGS) quadrangle or topographic maps, by using a GPS unit, by calling 1-(888) ASK-USGS, by searching for your facility's address on several commercial "map" sites on the Internet, or by accessing EPA's web site at <http://www.epa.gov/owm/sw/industry/index.htm> and selecting Latitude and Longitude Finders under the Resources/Permit section.
4. Indicate whether the facility is located on Indian Country lands (e.g., a federally recognized reservation, etc.).
5. Indicate whether the facility or site discharges storm water into a receiving water(s) and/or a municipal separate storm sewer system (MS4). Enter the name(s) of the closest receiving water(s) and/or the MS4 (An MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body and is designed or used for collecting or conveying storm water.)
6. List your primary and secondary four 4-digit Standard Industrial Classification (SIC) codes or 2-character Activity Codes that best describe the principal products or services provided at the facility or site identified in Section C of this application. For industrial activities defined in 40 CFR 122.26(b)(f)(i)-(ix) and (xii) that do not have SIC codes that accurately describe the principal products produced or services provided, use the following 2-character Activity Codes: HZ = Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26(b)(f)(iv)]; LF = Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26(b)(f)(v)]; SE = Steam electrical power generating facilities, including coal handling sites [40 CFR 122.26(b)(f)(vii)]; TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage [40 CFR 122.26(b)(f)(ix)]; or Alternatively, if your facility or site was specifically designated by your NPDES permitting authority (EPA), enter "AD."

Section D. Certification

Certification statement and signature. (CAUTION: An unsigned or undated NOI form will prevent the granting of permit coverage.) Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means:

- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 3.7 hours per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, Office of Environmental Information Services, Collection Services Division (2823), USEPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB control number of this form on any correspondence. Do not send the completed NOI form to this address.

Attachment 2

Multi-Sector General Permit, October 30, 2000

Final Reissuance of the NPDES Stormwater Multi-Sector General Permit for Industrial Activities; Correction, January 9, 2001

Final Reissuance of the NPDES Stormwater Multi-Sector General Permit for Industrial Activities; Correction, March 23, 2001



Federal Register

Monday,
October 30, 2000

Part II

Environmental Protection Agency

**Final Reissuance of National Pollutant
Discharge Elimination System (NPDES)
Storm Water Multi-Sector General Permit
for Industrial Activities; Notice**

**ENVIRONMENTAL PROTECTION
AGENCY**

[FRL-6880-5]

**Final Reissuance of National Pollutant
Discharge Elimination System
(NPDES) Storm Water Multi-Sector
General Permit for Industrial Activities**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Final NPDES general permit.

SUMMARY: The Regional Administrators of EPA Regions 1, 2, 3, 4, 6, 8, 9 and 10 are today reissuing EPA's NPDES Storm Water Multi-Sector General Permit (MSGP). This general permit was first issued on September 29, 1995 (60 FR 50804), and amended on February 9, 1996 (61 FR 5248), February 20, 1996 (61 FR 6412), September 24, 1996 (61 FR 50020), August 7, 1998 (63 FR 42534) and September 30, 1998 (63 FR 52430). The reissuance of the MSGP was proposed by EPA on March 30, 2000 (65 FR 17010). Today's final MSGP will authorize the discharge of storm water from industrial facilities consistent with the terms of the permit.

DATES: This MSGP shall be effective on October 30, 2000. This effective date is necessary to provide dischargers with the immediate opportunity to comply with Clean Water Act requirements in light of the expiration of the existing MSGP on October 1, 2000. Deadlines for submittal of notices of intent are provided in Section VI.A.2 of this fact sheet and Part 2.1 of the MSGP. Today's MSGP also provides additional dates for compliance with the terms of the permit.

ADDRESSES: The index to the administrative record for the final MSGP is available at the appropriate Regional Office or from the EPA Water Docket Office in Washington, DC. The administrative record, including documents immediately referenced in this reissuance notice and applicable documents used to support the original issuance of the MSGP in 1995, are stored at the EPA Water Docket Office at the following address: Water Docket, MC-4101, U.S. EPA, 401 M Street SW, room EB57, Washington, DC 20460. The records are available for inspection from 9 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. For appointments to examine any portion of the administrative record, please call the Water Docket Office at (202) 260-3027. A reasonable fee may be charged for copying. Specific record information can also be made available at the

appropriate Regional Office upon request.

FOR FURTHER INFORMATION CONTACT: For further information on the final MSGP, contact the appropriate EPA Regional Office. The name, address and phone number of the EPA Regional Storm Water Coordinators are provided in Section VI.F of this fact sheet. Information is also available through the Internet on EPA's Office of Wastewater Management website at <http://www.epa.gov/owm/sw>.

SUPPLEMENTARY INFORMATION: The following fact sheet provides background information and explanation for today's notice of final MSGP reissuance, including a summary Response to Comments regarding the comments which were received on the proposed MSGP. The actual language of the final MSGP appears after this fact sheet.

Fact Sheet
Table of Contents

- I. Background
 - A. Pollutants in Storm Water Discharges Associated with Industrial Activities in General
 - B. Summary of Options for Controlling Pollutants
 - C. The Federal/Municipal Partnership: The Role of Municipal Operators of Large and Medium Municipal Separate Storm Sewer Systems
- II. Organization of Final MSGP and Summary of Changes From the 1995 MSGP and the March 30, 2000 Proposed MSGP
- III. Geographic Coverage of Final MSGP
- IV. Categories of Facilities Covered by Final MSGP
- V. Limitations on Coverage
 - A. Storm Water Discharges Subject to Effluent Guidelines Limitations, Including New Source Performance Standards
 - B. Historic Preservation
 - C. Endangered Species
 - D. New Storm Water Discharges to Water Quality-Impaired or Water Quality-Limited Receiving Waters
 - E. Storm Water Discharges Subject to Anti-Degradation Provisions of Water Quality Standards
 - F. Storm Water Discharges Previously Covered by an Individual Permit
 - G. Requiring Coverage Under an Individual Permit or an Alternate General Permit
- VI. Summary of Common Permit Conditions
 - A. Notification Requirements
 - 1. Content of NOI
 - 2. Deadlines
 - 3. Municipal Separate Storm Sewer System Operator Notification
 - 4. Notice of Termination
 - 5. Conditional Exclusion for No Exposure
 - B. Special Conditions
 - 1. Prohibition of Non-storm Water Discharges
 - 2. Releases of Reportable Quantities of Hazardous Substances and Oil

- 3. Co-located Industrial Facilities
- 4. Numeric Effluent Limitations
- 5. Compliance with Water Quality Standards
- C. Common Storm Water Pollution Prevention Plan (SWPPP) Requirements
 - 1. Pollution Prevention Team
 - 2. Description of the Facility and Potential Pollution Sources
 - 3. Selection and Implementation of Storm Water Controls
 - 4. Deadlines
- D. Special Requirements
 - 1. Special Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Requirements
 - 2. Special Requirements for Storm Water Discharges Associated With Industrial Activity From Salt Storage Facilities
 - 3. Consistency With Other Plans
- E. Monitoring and Reporting Requirements
 - 1. Analytical Monitoring Requirements
 - 2. Compliance Monitoring
 - 3. Alternate Certification
 - 4. Reporting and Retention Requirements
 - 5. Sample Type
 - 6. Representative Discharge
 - 7. Sampling Waiver
 - 8. Quarterly Visual Examination of Storm Water Quality
- F. Regional Offices
 - 1. Notice of Intent Address
 - 2. EPA Regional Office Addresses and Contacts
- VII. Cost Estimates For Common Permit Requirements
- VIII. Special Requirements for Discharges Associated With Specific Industrial Activities
- IX. Summary of Responses to Comments on the Proposed MSGP
- X. Economic Impact (Executive Order 12866)
- XI. Unfunded Mandates Reform Act
- XII. Paperwork Reduction Act
- XIII. Regulatory Flexibility Act

I. Background

The Regional Administrators of EPA Regions 1, 2, 3, 4, 6, 8, 9 and 10 are today reissuing EPA's NPDES Storm Water Multi-Sector General Permit (MSGP). The MSGP currently authorizes storm water discharges associated with industrial activity for most areas of the United States where the NPDES permit program has not been delegated. The MSGP was originally issued on September 29, 1995 (60 FR 50804), and amended on February 9, 1996 (61 FR 5248), February 20, 1996 (61 FR 6412), September 24, 1996 (61 FR 50020), August 7, 1998 (63 FR 42534) and September 30, 1998 (63 FR 52430). The proposed reissuance of the MSGP appeared in the **Federal Register** on March 30, 2000 (65 FR 17010).

The 1995 MSGP was the culmination of the group permit application process described at 40 CFR 122.26(c)(2). A group permit application was one of three options for obtaining an NPDES industrial storm water permit which

were provided by the 1990 storm water permit application regulations (55 FR 48063). The 1990 regulations also provided that industrial facilities could apply for coverage under an existing general NPDES permit or apply for an individual permit. In 1992, EPA issued a baseline general permit (57 FR 41175 and 57 FR 44412) to cover industrial facilities which did not select the group application option or submit an application for an individual permit.

In response to the group application option, EPA received applications from approximately 1,200 groups representing nearly all of the categories of industrial facilities listed in the storm water regulations at 40 CFR 122.26(b)(14). To facilitate permit issuance for the group applications, EPA consolidated the groups into 29 industrial sectors, with subsectors also included in certain sectors as appropriate.

In developing the requirements for the 1995 MSGP, EPA utilized and built upon the storm water pollution control requirements of the 1992 baseline general permit. The baseline permit had required a storm water pollution prevention plan (SWPPP) with generic best management practice (BMP) requirements which applied to all facilities covered by the permit. In addition, certain categories of facilities were required to monitor storm water discharges based on EPA's best professional judgment concerning the risks posed by the facilities.

The group permit applications included information concerning the specific types of operations which are present at the different types of industrial facilities, potential sources of pollutants at the facilities, industry-specific BMPs which are available, and monitoring data from the different types of facilities. Using this information, EPA developed SWPPP requirements for the MSGP which consisted of the generic requirements of the baseline permit plus industry-specific requirements developed from the group application information. Also, the monitoring requirements of the 1995 MSGP were developed using the monitoring data submitted with the group applications rather than EPA's best professional judgment.

On September 30, 1998 (63 FR 52430), EPA terminated the baseline general permit and required facilities which were previously covered by the baseline permit to seek coverage under the MSGP (or submit an individual permit application). EPA believed that the MSGP, with its industry-specific requirements, would provide improved

water quality benefits as compared to the baseline permit.

For today's reissuance of the MSGP, EPA has re-evaluated the industry-specific requirements of the MSGP. In a few instances, additional requirements have been included based on new information which has been obtained since the original MSGP issuance in 1995. These changes are discussed in more detail in Section VIII of this fact sheet, and in the Response to Comments. EPA also re-evaluated the monitoring requirements of the existing MSGP. However, after review of the comments received from the public, and the monitoring data received during the term of the 1995 MSGP, EPA has retained the same monitoring requirements for the reissued MSGP as were found in the 1995 MSGP.

A. Pollutants in Storm Water Discharges Associated With Industrial Activities in General

The volume and quality of storm water discharges associated with industrial activity will depend on a number of factors, including the industrial activities occurring at the facility, the nature of the precipitation, and the degree of surface imperviousness. A discussion of these factors was provided in the fact sheet for the original proposed MSGP (58 FR 61146 Nov. 19, 1993), and is not being repeated here.

B. Summary of Options for Controlling Pollutants

Pollutants in storm water discharges from industrial plants may be reduced using the following methods: Eliminating pollution sources, implementing BMPs to prevent pollution, using traditional storm water management practices, and providing end-of-pipe treatment. A general discussion of each of these was included in the original proposed MSGP (58 FR 61146, Nov. 19, 1993), and is not being repeated here.

C. The Federal/Municipal Partnership: The Role of Municipal Operators of Large and Medium Municipal Separate Storm Sewer Systems

A key issue in developing a workable regulatory program for controlling pollutants in storm water discharges associated with industrial activity is the proper use and coordination of limited regulatory resources. This is especially important when addressing the appropriate role of municipal operators of large and medium municipal separate storm sewer systems in the control of pollutants in storm water associated with industrial activity which discharge

through municipal separate storm sewer systems. The original proposed MSGP discussed several key policy factors (see 58 FR 61146).

II. Organization of Final MSGP and Summary of Changes From the 1995 MSGP and the March 30, 2000 Proposed MSGP

The organization of today's final MSGP has been revised from the 1995 MSGP to reduce the overall size of the permit. In Part XI of the 1995 MSGP, many requirements such as SWPPP and monitoring requirements which were common to each sector were repeated in each sector, greatly adding to length of the permit. For today's reissuance, such requirements are found only once in expanded sections of the permit (Parts 4 and 5) which include requirements common to each sector. Requirements which are genuinely unique to a given sector or subsector are found in Part 6 in the permit. Similarly, Section VIII of the fact sheet for the 1995 MSGP repeated certain explanatory information in the discussions of sector-specific requirements, and also included considerable descriptive information about the various sectors. To reduce the length of today's notice, most of this information is not being repeated. Section VIII of today's fact sheet focuses on the changes (if any) in the various sectors. The reorganization and reduction of duplication have reduced the size of the permit by approximately 75%.

Also note that the section/paragraph identification scheme of today's final MSGP has been modified from the 1995 MSGP. The original scheme utilized a sometimes lengthy combination of numbers, letters and Roman numerals (in both upper and lower cases) which many permittees found confusing. Today's reissuance identifies sections/paragraphs, and hence permit conditions, using numbers only, except in Part 6 (which also incorporates the sector letters from the 1995 MSGP for consistency). Under the original permit, only the last digit or letter of the section/paragraph identifier appeared with its accompanying section title/paragraph, making it difficult to determine where you were in the permit. In today's reissuance, the entire string of identifying numbers is listed at each section/paragraph to facilitate recognizing where you are and in citing and navigating through the permit. For example, paragraph number 1.2.3.5 tells you immediately that you are in Part 1, section 2, paragraph 3, subparagraph 5; whereas under the 1995 MSGP you would only see an "e", thereby forcing you to hunt back through the permit to

determine that you were in Part I.B.3.e. The exception to the numbering rule is in Part 6, where the Sector letters from the 1995 MSGP have been retained to correspond to the sectors of industry covered by the permit and make it easy to tell that you are in a section of the permit which has conditions which only apply to a specific industrial sector. For example, paragraph 6.F.3.4 immediately tells you that you are in Part 6 and looking at conditions that only apply to sector "F" facilities. In some cases, requirements which previously appeared in a single paragraph are now found listed out as separate individual items. The final MSGP is also written in EPA's "readable regulations" style using terms like "you" and "your" in referring to permittees, etc.

Following below is a list of the major changes included in the proposed MSGP of March 30, 2000 (as compared to the 1995 MSGP) and retained in today's final MSGP. These changes are discussed in more detail later in this fact sheet.

1. Requirements for co-located activities clarified (Part 1.2.1.1).
2. Incidental cooling tower mist discharges included as an authorized non-storm water discharge, subject to certain requirements (Parts 1.2.2.13 and 4.4.2.3).
3. Eligibility provided for coverage of inactive mining activities occurring on Federal Lands where an operator has not been identified (Part 1.2.3).
4. Clarified language for situations where a discharge previously covered by an individual permit can be covered under today's MSGP (Part 1.2.3.3).
5. Clarified/added language for compliance with water quality standards and requirements for follow-up actions if standards are exceeded (Parts 1.2.3.5 and 3.3).
6. ESA and NHPA eligibility requirements modified (Parts 1.2.3.6 and 1.2.3.7).
7. Eligibility requirements for discharges to water quality impaired/limited waterbodies added/clarified (Part 1.2.3.8).
8. Clarified that discharges which do not comply with anti-degradation requirements are not authorized by the permit (Part 1.2.3.9).
9. Deadline of 30 days for submission of an NOT added (Part 1.4.2).
10. Opportunity for termination of permit coverage based on the "no exposure exemption" from the Phase II storm water regulations (64 FR 68722, 12/8/99) added (Parts 1.5 and 11.4).
11. Notice of Intent requirements and modified form (Part 2.2 and Addendum D).

12. Permit will accommodate electronic filing of NOIs, NOTs, or DMRs, should these options become available during the term of the permit (Parts 2.3 and 7.1)

13. Prohibition on discharges of solid materials and floating debris and requirement to minimize off-site tracking of materials and generation of dust added (Part 4.2.7.2.3).

14. Requirement to include a copy of the permit with the storm water pollution prevention plan (SWPPP) was added (Part 4.7).

15. Special conditions for EPCRA 313 facilities were modified (Part 4.12).

16. Monitoring requirements reorganized and additional clarification/revisions on monitoring periods, waivers, default minimum monitoring for limitations added by State 401 certification, and reporting requirements added (Part 5).

17. Manufacturing of fertilizer from leather scraps (SIC 2873) moved from Sector Z—Leather Tanning and Finishing to Sector C—Chemical and Allied Products (Table 1–1 and Part 6.C).

18. New effluent limitations guidelines for landfills in Sectors K and L included; the final guidelines were published in the **Federal Register** on January 19, 2000 (65 FR 3007) (Parts 6.K.5 and 6.L.6).

19. Sector AD (Non-Classified Facilities) language clarified to say that facilities cannot choose coverage under Sector AD, but can only be so assigned by permitting authority (Part 6.AD).

20. Additional BMP requirements in Sectors S, T, and Y added (Parts 6.S, 6.T, and 6.Y).

21. NOI to continue coverage under the permit when it expires (without a replacement permit in place) is not required and the reapplication process has been clarified (Part 9.2).

22. Process for EPA to remove facilities from permit coverage clarified (Part 9.12).

Following below is another list which summarizes the provisions of today's final MSGP which differ from the proposed MSGP of March 30, 2000.

1. Reference to "drinking fountain water" removed from Part 1.2.2.2.3.
2. Part 1.2.3.3.2.1 of the proposed MSGP was deleted. This requirement had not allowed MSGP coverage for facilities previously covered by another permit, unless the other permit only covered storm water and MSGP authorized non-storm water discharges.
3. Part 2.2.3.6 revised to indicate that the NOI must include the name of the MS4 receiving the discharges only if it is different from the permittee.

4. Part 4.9.3 revised to clarify the time frame for implementation of revised SWPPP.

5. Part 4.11 revised to require permittees to provide a copy of their SWPPP to the public when requested in writing to do so.

6. Sector E coverage was modified for consistency with the September 30, 1998 MSGP modification.

7. In Sector G, language was added stating that non-storm water discharges must be tested or evaluated; this change ensures consistency with the 1995 MSGP. Also in Sector G, the definition of "reclamation" was revised.

8. The title for Sector I was changed to include "Refining."

9. Sector T revised for consistency with 40 CFR 122.26(b)(14)(ix) concerning size of POTWs covered.

10. Section V.C. deleted the requirement to consider species proposed for listing as endangered or threatened.

III. Geographic Coverage of Final MSGP

The geographic coverage of today's final MSGP includes the following areas:

EPA Region 1—for the States of Maine, Massachusetts and New Hampshire; for Indian Country lands located in Massachusetts, Connecticut, Rhode Island and Maine; and for Federal facilities in the State of Vermont.

EPA Region 2—for the Commonwealth of Puerto Rico.

EPA Region 3—for the District of Columbia and Federal facilities in the State of Delaware.

EPA Region 4—for Indian Country lands located in the State of Florida.

EPA Region 6—for the State of New Mexico; for Indian Country lands located in the States of Louisiana, New Mexico, Texas and Oklahoma (except Navajo lands and Ute Mountain Reservation lands); for oil and gas facilities under SIC codes 1311, 1381, 1382, and 1389 in the State of Oklahoma not on Indian Country lands; and oil and gas facilities under SIC codes 1311, 1321, 1381, 1382, and 1389 in the State of Texas not on Indian Country lands.

EPA Region 8—for Federal facilities in the State of Colorado; for Indian Country lands in Colorado, North Dakota, South Dakota, Wyoming and Utah (except Goshute and Navajo Reservation lands); for Ute Mountain Reservation lands in Colorado and New Mexico; and for Pine Ridge Reservation lands in South Dakota and Nebraska.

EPA Region 9—for the State of Arizona; for the Territories of Johnston Atoll, American Samoa, Guam, the

Commonwealth of Northern Mariana Islands, Midway and Wake Islands; for Indian Country lands located in Arizona, California, and Nevada; and for the Goshute Reservation in Utah and Nevada, the Navajo Reservation in Utah, New Mexico, and Arizona, the Duck Valley Reservation in Nevada and Idaho, and the Fort McDermitt Reservation in Oregon and Nevada.

EPA Region 10—for the State of Idaho; for Indian Country lands located in Alaska, Oregon (except Fort McDermitt Reservation lands), Idaho (except Duck Valley Reservation lands) and Washington; and for Federal facilities in Washington.

For several reasons, the geographic area of coverage described above differs from the area of coverage of the 1995 MSGP. Indian country in Vermont and New Hampshire has been removed since there are no Federally recognized tribes in these States. Also, state NPDES permit programs have since been authorized in the States of South Dakota, Louisiana, Oklahoma (except for certain oil and gas facilities in Oklahoma) and Texas (again except for oil and gas facilities). In Oklahoma, EPA maintains NPDES permitting authority over oil and gas exploration and production related industries, and pipeline operations regulated by the Oklahoma Corporation Commission (See 61 FR 65049). Oklahoma received NPDES program authorization only for those discharges covered by the authority of the Oklahoma Department of Environmental Quality (ODEQ). In Texas, EPA maintains NPDES permitting authority over oil and gas

discharges regulated by the Texas Railroad Commission (See 63 FR 51164). Texas received NPDES program authorization only for those discharges covered by the authority of the Texas Natural Resource Conservation Commission (TNRCC).

Specific additional conditions required in Region 6 as a result of a State or Tribal CWA Section 401 certification have been added for New Mexico, Oklahoma, and the Pueblos of Isleta, Pojoaque, San Juan, and Sandia. Numeric limitations for discharges in Texas contained in the previous permit pursuant to 31 TAC 319.22 and 319.23 have been continued in accordance with 40 CFR 122.44(d) and (l).

Federal facilities in Colorado, and Indian country located in Colorado (including the portion of the Ute Mountain Reservation located in New Mexico), North Dakota, South Dakota (including the portion of the Pine Ridge Reservation located in Nebraska), Utah (except for the Goshute and Navajo Reservation lands) and Wyoming were not included in the 1995 MSGP, but are included in today's MSGP. Indian country lands in Montana are not included at this time due to a recent court order. Prior to today, industrial facilities in these areas were largely covered under an extension of EPA's 1992 baseline general permit for industries (57 FR 41175).

Also, subsequent to the issuance of the MSGP in 1995, coverage was extended to the Island of Guam on September 24, 1996 (61 FR 50020) and the Commonwealth of the Northern Mariana Islands on September 30, 1998

(63 FR 52430). Certification was not received from Arizona in time for that state to be included in this permit.

The 1995 MSGP was issued in the State of Alaska, except Indian Country, on February 9, 1996 (61 FR 5247). Industrial facilities in Alaska outside of Indian Country will continue to be covered under the 1995 MSGP through February 9, 2001. EPA will reissue the permit for Alaska at a later date, and will include any state-specific modifications or additions or additions applicable to parts 1 through 12 of this permit as part of the State's Clean Water Act Section 401 or Coastal Zone Management Act certification processes.

Lastly, today's MSGP reissuance differs from the March 30, 2000 MSGP proposal in that the State of Florida (except for Indian country) is not included. This is a result of the recent NPDES program delegation to the State of Florida.

There are some areas where the NPDES permit program has not been delegated (such as Indian country in states not listed above) where neither the MSGP nor an alternate general permit is available for authorization of storm water discharges associated with industrial activity. However, only a very small number of permittees exist in such areas and individual permits are issued as needed.

IV. Categories of Facilities Covered by the Final MSGP

Today's final MSGP authorizes storm water discharges associated with industrial activity from the categories of facilities shown in Table 1 below:

TABLE 1.—SECTOR/SUBSECTORS COVERED BY THE FINAL MSGP

Subsector	SIC code	Activity represented
Sector A. Timber Products		
1*	2421	General Sawmills and Planning Mills.
2	2491	Wood Preserving.
3*	2411	Log Storage and Handling.
4*	2426	Hardwood Dimension and Flooring Mills.
	2429	Special Product Sawmills, Not Elsewhere Classified.
	2431–2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood.
	2448, 2449	Wood Containers.
	2451, 2452	Wood Buildings and Mobile Homes.
	2493	Reconstituted Wood Products.
	2499	Wood Products, Not Elsewhere Classified.
Sector B. Paper and Allied Products Manufacturing		
1	2611	Pulp Mills.
2	2621	Paper Mills.
3*	2631	Paperboard Mills.
4	2652–2657	Paperboard Containers and Boxes.
5	2671–2679	Converted Paper and Paperboard Products, Except Containers and Boxes.
Sector C. Chemical and Allied Products Manufacturing		
1*	2812–2819	Industrial Inorganic Chemicals.

TABLE 1.—SECTOR/SUBSECTORS COVERED BY THE FINAL MSGP—Continued

Subsector	SIC code	Activity represented
2*	2821–2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Man-made Fibers Except Glass.
3	2833–2836	Medicinal chemicals and botanical products; pharmaceutical preparations; invitro and in vivo diagnostic substances; biological products, except diagnostic substances.
4*	2841–2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations.
5	2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products.
6	2861–2869	Industrial Organic Chemicals.
7*	2873–2879	Agricultural Chemicals, Including Facilities that Make Fertilizer Solely from Leather Scraps and Leather Dust.
8	2891–2899	Miscellaneous Chemical Products.
9	3952 (limited to list)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors.

Sector D. Asphalt Paving and Roofing Materials Manufacturers and Lubricant Manufacturers.

1*	2951, 2952	Asphalt Paving and Roofing Materials.
2	2992, 2999	Miscellaneous Products of Petroleum and Coal.

Sector E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing

1	3211	Flat Glass.
	3221, 3229	Glass and Glassware, Pressed or Blown.
	3231	Glass Products Made of Purchased Glass.
	3281	Cut Stone and Stone Products.
	3291–3292	Abrasive and Asbestos Products.
	3296	Mineral Wool.
	3299	Nonmetallic Mineral Products, Not Elsewhere Classified.
2	3241	Hydraulic Cement.
3*	3251–3259	Structural Clay Products.
	3261–3269	Pottery and Related Products.
	3297	Non-Clay Refractories.
4*	3271–3275	Concrete, Gypsum and Plaster Products.
	3295	Minerals and Earth's, Ground, or Otherwise Treated.

Sector F. Primary Metals

1*	3312–3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills.
2*	3321–3325	Iron and Steel Foundries.
3	3331–3339	Primary Smelting and Refining of Nonferrous Metals.
4	3341	Secondary Smelting and Refining of Nonferrous Metals.
5*	3351–3357	Rolling, Drawing, and Extruding of Nonferrous Metals.
6*	3363–3369	Nonferrous Foundries (Castings).
7	3398, 3399	Miscellaneous Primary Metal Products.

Sector G. Metal Mining (Ore Mining and Dressing)

1	1011	Iron Ores.
2*	1021	Copper Ores.
3	1031	Lead and Zinc Ores.
4	1041, 1044	Gold and Silver Ores.
5	1061	Ferroalloy Ores, Except Vanadium.
6	1081	Metal Mining Services.
7	1094, 1099	Miscellaneous Metal Ores.

Sector H. Coal Mines and Coal Mining-Related Facilities

NA*	1221–1241	Coal Mines and Coal Mining-Related Facilities Sector.
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Sector I. Oil and Gas Extraction and Refining

1*	1311	Crude Petroleum and Natural Gas.
2	1321	Natural Gas Liquids.
3*	1381–1389	Oil and Gas Field Services.
4	2911	Petroleum refining.

Sector J. Mineral Mining and Dressing

1*	1411	Dimension Stone.
	1422–1429	Crushed and Broken Stone, Including Rip Rap.

TABLE 1.—SECTOR/SUBSECTORS COVERED BY THE FINAL MSGP—Continued

Subsector	SIC code	Activity represented
	1481	Nonmetallic Minerals, Except Fuels.
2*	1442, 1446	Sand and Gravel.
3	1455, 1459	Clay, Ceramic, and Refractory Materials.
4	1474–1479	Chemical and Fertilizer Mineral Mining.
	1499	Miscellaneous Nonmetallic Minerals, Except Fuels.
Sector K. Hazardous Waste Treatment Storage or Disposal Facilities		
NA*	HZ	Hazardous Waste Treatment, Storage or Disposal.
Sector L. Landfills and Land Application Sites		
NA*	LF	Landfills, Land Application Sites and Open Dumps.
Sector M. Automobile Salvage Yards		
NA*	5015	Automobile Salvage Yards.
Sector N. Scrap Recycling Facilities		
NA*	5093	Scrap Recycling Facilities.
Sector O. Steam Electric Generating Facilities		
NA*	SE	Steam Electric Generating Facilities.
Sector P. Land Transportation		
1	4011, 4013	Railroad Transportation.
2	4111–4173	Local and Highway Passenger Transportation.
3	4212–4231	Motor Freight Transportation and Warehousing.
4	4311	United States Postal Service.
5	5171	Petroleum Bulk Stations and Terminals.
Sector Q. Water Transportation		
NA*	4412–4499	Water Transportation.
Sector R. Ship and Boat Building or Repairing Yards		
NA	3731, 3732	Ship and Boat Building or Repairing Yards.
Sector S. Air Transportation Facilities		
NA*	4512–4581	Air Transportation Facilities.
Sector T. Treatment Works		
NA*	TW	Treatment Works.
Sector U. Food and Kindred Products		
1	2011–2015	Meat Products.
2	2021–2026	Dairy Products.
3	2032	Canned, Frozen and Preserved Fruits, Vegetables and Food Specialties.
4*	2041–2048	Grain Mill Products.
5	2051–2053	Bakery Products.
6	2061–2068	Sugar and Confectionery Products.
7*	2074–2079	Fats and Oils.
8	2082–2087	Beverages.
9	2091–2099	Miscellaneous Food Preparations and Kindred Products.
	2111–2141	Tobacco Products.
Sector V. Textile Mills, Apparel, and Other Fabric Product Manufacturing		
1	2211–2299	Textile Mill Products.
2	2311–2399	Apparel and Other Finished Products Made From Fabrics and Similar Materials.
	3131–3199 (except 3111)	Leather Products.

TABLE 1.—SECTOR/SUBSECTORS COVERED BY THE FINAL MSGP—Continued

Subsector	SIC code	Activity represented
Sector W. Furniture and Fixtures		
NA	2511-2599	Furniture and Fixtures.
	2434	Wood Kitchen Cabinets.
Sector X. Printing and Publishing		
NA	2711-2796	Printing, Publishing and Allied Industries.
Sector Y. Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries		
1*	3011	Tires and Inner Tubes.
	3021	Rubber and Plastics Footwear.
	3052, 3053	Gaskets, Packing, and Sealing Devices and Rubber and Plastics Hose and Belting.
	3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified.
2	3081-3089	Miscellaneous Plastics Products.
	3931	Musical Instruments.
	3942-3949	Dolls, Toys, Games and Sporting and Athletic Goods.
	3951-3955 (except 3952 as specified in Sector C).	Pens, Pencils, and Other Artists' Materials.
	3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal.
	3991-3999	Miscellaneous Manufacturing Industries.
Sector Z. Leather Tanning and Finishing		
NA	3111	Leather Tanning and Finishing.
Sector AA. Fabricated Metal Products		
1*	3411-3499	Fabricated Metal Products, Except Machinery and Transportation Equipment and Cutting, Engraving and Allied Services.
	3911-3915	Jewelry, Silverware, and Plated Ware.
2*	3479	Coating, Engraving, and Allied Services.
Sector AB. Transportation Equipment, Industrial or Commercial Machinery		
NA	3511-3599 (except 3571-3579)	Industrial and Commercial Machinery (except Computer and Office Equipment—see Sector AC).
NA	3711-3799 (except 3731, 3732)	Transportation Equipment (except Ship and Boat Building and Repairing—see Sector R).
Sector AC. Electronic, Electrical, Photographic and Optical Goods		
NA	3612-3699	Electronic, Electrical Equipment and Components, Except Computer Equipment.
	3812-3873	Measuring, Analyzing and Controlling Instrument; Photographic and Optical Goods, Watches and Clocks.
	3571-3579	Computer and Office Equipment.
Sector AD. Reserved for Facilities Not Covered Under Other Sectors and Designated by the Director		

* Denotes subsector with analytical (chemical) monitoring requirements.

NA indicates those industry sectors in which subdivision into subsectors was determined to be not applicable.

The final MSGP modification of September 30, 1998 (63 FR 52430) expanded the coverage of the 1995 MSGP to include a small number of categories of facilities which had been covered by the 1992 baseline industrial general permit but excluded from the MSGP. In Table 1 above, these categories have been included in the appropriate sectors/subsectors of the MSGP as determined by the September 30, 1998 modification.

With the September 30, 1998 modification, EPA believes that the MSGP now covers all of the categories

of industrial facilities which may discharge storm water associated with industrial activity as defined at 40 CFR 122.26(b)(14) (except construction activities disturbing five or more acres which are permitted separately). However, the September 30, 1998 modification also added another sector to the MSGP (Sector AD) to cover any inadvertent omissions. EPA has retained Sector AD in today's reissued MSGP.

Sector AD is further intended to provide a readily available means for covering many of the storm water facilities which are designated for

permitting in accordance with NPDES regulations at 40 CFR 122.26(g)(1)(i). These regulations provide that permit applications may be required within 180 days of notice for any discharges which contribute to a violation of a water quality standard, or are determined to be significant sources of pollutants.

EPA also recognizes that a new North American Industry Classification System (NAICS) was recently adopted by the Office of Management and Budget (62 FR 17288, April 9, 1997). NAICS replaces the 1987 standard industrial classification (SIC) code

system for the collection of statistical economic data. However, the use of the new system for nonstatistical purposes is optional. EPA considered the use of NAICS for the today's MSGP reissuance, but elected to retain the 1987 SIC code system since the storm water regulations (40 CFR 122.26(b)(14)) reference the previous system and this system has generally proven to be adequate for identifying the facilities covered by

storm water regulations. EPA will consider transitioning to the new NAICS system in future rule making.

V. Limitations on Coverage

A. Storm Water Discharges Subject to Effluent Guideline Limitations, Including New Source Performance Standards

The general prohibition on coverage of storm water subject to an effluent

guideline limitation in the 1995 MSGP has been retained in today's MSGP reissuance. Only those storm water discharges subject to the following effluent guidelines are eligible for coverage (provided they meet all other eligibility requirements):

TABLE 2.—EFFLUENT GUIDELINES APPLICABLE TO DISCHARGES THAT MAY BE ELIGIBLE FOR PERMIT COVERAGE

Effluent guideline	New Source performance standards included in effluent guidelines?	Sectors with affected facilities
Runoff from material storage piles at cement manufacturing facilities [40 CFR Part 411 Subpart C (established February 23, 1977)].	Yes	E
Contaminated runoff from phosphate fertilizer manufacturing facilities [40 CFR Part 418 Subpart A (established April 8, 1974)].	Yes	C
Coal pile runoff at steam electric generating facilities [40 CFR Part 423 (established November 19, 1982)] Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas [40 CFR Part 429, Subpart I (established January 26, 1981)].	Yes Yes	O A
Mine dewatering discharges at crushed stone mines [40 CFR part 436, Subpart B]	No	J
Mine dewatering discharges at construction sand and gravel mines [40 CFR part 436, Subpart C]	No	J
Mine dewatering discharges at industrial sand mines [40 CFR part 436, Subpart D]	No	J
Runoff from asphalt emulsion facilities [40 CFR Part 443 Subpart A (established July 24, 1975)].	Yes	D
Runoff from landfills, [40 CFR Part 445, Subpart A and B (established February 2, 2000.)	Yes	K & L

Section 306 of the Clean Water Act (CWA) requires EPA to develop performance standards for all new sources described in that section. These standards apply to all facilities which go into operation after the date the standards are promulgated. Section 511(c) of the CWA requires the Agency to comply with the National Environmental Policy Act (NEPA) prior to issuance of a permit under the authority of Section 402 of the CWA to facilities defined as a new source under Section 306.

The fact sheet for the 1995 MSGP described a process for ensuring compliance with NEPA for the MSGP (60 FR 50809). This process, which is repeated below, has been retained for the reissued MSGP. Additional guidance is found in a new Addendum C to the final MSGP.

Facilities which are subject to the performance standards for new sources as described in this section of the fact sheet must provide EPA with an Environmental Information Document pursuant to 40 CFR 6.101 prior to seeking coverage under this permit. This information shall be used by the Agency to evaluate the facility under the requirements of NEPA in an Environmental Review. The Agency will make a final decision regarding the direct or indirect impact of the discharge. The Agency will follow all

administrative procedures required in this process. The permittee must obtain a copy of the Agency's final finding prior to the submission of a Notice of Intent to be covered by this general permit. In order to maintain eligibility, the permittee must implement any mitigation required of the facility as a result of the NEPA review process. Failure to implement mitigation measures upon which the Agency's NEPA finding is based is grounds for termination of permit coverage. In this way, EPA has established a procedure which allows for the appropriate review procedures to be completed by this Agency prior to the issuance of a permit under Section 402 of the CWA to an operator of a facility subject to the new source performance standards of Section 306 of the CWA. EPA believes that it has fulfilled its requirements under NEPA for this Federal action under Section 402 of the CWA.

B. Historic Preservation

The National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal undertakings, including undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term "Federal undertaking" is defined in the existing NHPA regulations to include any project, activity, or program

under the direct or indirect jurisdiction of a Federal agency that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects for that project, activity, or program. See 36 CFR 802(o). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. See 36 CFR 802(e).

Federal undertakings include EPA's issuance of general NPDES permits. In light of NHPA requirements, EPA included a provision in the eligibility requirements of the 1995 MSGP for the consideration of the effects to historic properties. That provision provided that an applicant is eligible for permit coverage only if: (1) the applicant's storm water discharges and BMPs to control storm water runoff do not affect a historic property, or (2) the applicant has obtained, and is in compliance with, a written agreement between the applicant and the State Historic Preservation Officer (SHPO) that outlines all measures to be taken by the applicant to mitigate or prevent adverse effects to the historic property. See Part I.B.6, 60 FR 51112 (September 29, 1995). When applying for permit coverage, applicants were required to certify in

the NOI that they are in compliance with the Part I.B.6 eligibility requirements. Provided there are no other factors limiting permit eligibility, MSGP coverage was then granted 48 hours after the postmark on the envelope used to mail the NOI.

The September 30, 1998 modification included two revisions of the original MSGP with respect to historic properties. First, EPA amended the original Part I.B.6.(ii) to include a reference to Tribal Historic Preservation Officers (THPOs) because MSGP coverage extends to Tribal lands and in recognition of the central role Tribal governments play in the protection of historic resources. Second, EPA included NHPA guidance and a list of SHPO and THPO addresses in a new Addendum I to the MSGP to assist applicants with the certification process for permit eligibility under this condition.

For today's MSGP reissuance, EPA has modified slightly the requirements of the first option for obtaining permit coverage to enhance the protection of historic properties. Permit coverage is only available if storm water and allowable non-storm water discharges and "discharge-related activities" do not affect historic properties. "Discharge-related activities" are defined to include activities which cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce or prevent pollution in the discharges. Discharge-related activities are included to ensure compliance with NHPA requirements to consider the effects of activities which are related to the activity which is permitted, *i.e.*, the storm water and non-storm water discharges. Because this change was minor, EPA is relying on its 1995 and 1998 consultations with the Advisory Council on Historic Preservation as its basis for reissuance of this permit.

Also, as discussed in Section VI.A.1 below, EPA intends to modify, contingent upon Office of Management and Budget review and approval, the Notice of Intent form to require that operators identify which of the above two options they are using to ensure eligibility for permit coverage under the MSGP. The NHPA guidance has also been modified to reflect the above pending changes, and appears in Addendum B in today's notice rather than Addendum I. Until the revised form is approved and issued, the current form (with minor clarifications) remains in effect.

Facilities seeking coverage under today's MSGP which cannot certify compliance with the NHPA requirements must submit individual permit applications to the permitting authority. For facilities already covered by the existing MSGP, the deadline for the individual applications is the same as that for NOIs requesting coverage under the reissued MSGP (December 29, 2000).

C. Endangered Species

The Endangered Species Act (ESA) of 1973 requires Federal Agencies such as EPA to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (also known collectively as the "Services"), that any actions authorized, funded, or carried out by the Agency (*e.g.*, EPA issued NPDES permits authorizing discharges to waters of the United States) are not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species (see 16 U.S.C. 1536(a)(2), 50 CFR 402 and 40 CFR 122.49(c)).

For the 1995 MSGP, EPA conducted formal consultation with the Services which resulted in a joint Service biological opinion issued by the FWS on March 31, 1995, and by the NMFS on April 5, 1995, which concluded that the issuance and operation of the MSGP was not likely to jeopardize the existence of any listed endangered or threatened species, or result in the adverse modification or destruction of any critical habitat.

The 1995 MSGP contained a number of conditions to protect listed species and critical habitat. Permit coverage was provided only where:

- The storm water discharge(s), and the construction of BMPs to control storm water runoff, were not likely to jeopardize species identified in Addendum H of the permit; or
- The applicant's activity had received previous authorization under the Endangered Species Act and established an environmental baseline that was unchanged; or,
- The applicant was implementing appropriate measures as required by the Director to address jeopardy.

For today's MSGP reissuance, EPA has modified the ESA-related requirements for obtaining permit coverage to enhance the protection of listed species. First, permit coverage is only available if storm water and allowable non-storm water discharges and "discharge-related activities" result in no jeopardy to listed species.

"Discharge-related activities" are defined to include activities which cause, contribute to or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce or prevent pollution in the discharges. Discharge-related activities are included for compliance with ESA requirements to consider the effects of activities which are related to the activity which is permitted, *i.e.*, the storm water and non-storm water discharges.

In addition, operators seeking coverage under the reissued MSGP must certify that they are eligible for coverage under one of the following five options which are provided in Parts 1.2.3.6.3.1 through 5 of the permit:

1. No endangered or threatened species or critical habitat are in proximity to the facility or the point where authorized discharges reach the receiving water; or

2. In the course of a separate federal action involving the facility (*e.g.*, EPA processing request for an individual NPDES permit, issuance of a CWA Section 404 wetlands dredge and fill permit, etc.), formal or informal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service under Section 7 of the ESA has been concluded and that consultation:

(a) addressed the effects of the storm water and allowable non-storm water discharges and discharge-related activities on listed species and critical habitat and

(b) the consultation resulted in either a no jeopardy opinion or a written concurrence by the Service(s) on a finding that the storm water and allowable non-storm water discharges and discharge-related activities are not likely to jeopardize listed species or critical habitat; or

3. The activities are authorized under Section 10 of the ESA and that authorization addresses the effects of the storm water and allowable non-storm water discharges and discharge-related activities on listed species and critical habitat; or

4. Using due diligence, the operator has evaluated the effects of the storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed endangered or threatened species and critical habitat and does not have reason to believe listed species or critical habitat would be jeopardized; or

5. The storm water and allowable non-storm water discharges and discharge-related activities were already addressed in another operator's

certification of eligibility under Part 1.2.3.6.3.1 through 1.2.3.6.3.4 which included the facility's activities. By certifying eligibility under this Part, a permittee agrees to comply with any measures or controls upon which the other operator's certification was based.

The first four options listed above are similar to the eligibility provisions of the 1995 MSGP. Option 5 was added to account for situations such as an airport facility where one operator (e.g., the airport authority) may have covered the entire airport through its certification. Option 5 allows other operators to take advantage of such a certification without repeating the reviews conducted by the first operator. Option 1 applies to operators who are not jeopardizing endangered species because listed species simply are not in proximity to their facility. Option 4 applies to operators who have endangered species nearby and must look more closely at potential jeopardy and may need to adopt measures to reduce the risk of jeopardy to listed species or critical habitat. The provision of the two options to determine that a facility is unlikely to jeopardize listed species, coupled with the pending new NOI requirement to indicate whether or not the Service was contacted in making the determination, will also allow for better oversight of the permit. Under the 1995 permit, there was no way to tell from the NOI information whether the decision on eligibility was due to no species in the county, a discussion with the Service, or a simple unilateral decision by the operator.

Addendum H of the 1995 MSGP provided instructions to assist permittees in determining whether they met the permit's ESA-related eligibility requirements. For today's reissued MSGP, this guidance has been updated to reflect the above requirements and appears as Addendum A. As noted in Section VI.A.1 below, EPA intends to modify the Notice of Intent form to conform with new ESA requirements discussed above.

Addendum H of the 1995 MSGP contained a list of proposed and listed endangered and threatened species that could be jeopardized by the discharges and measures to control pollutants in the discharges. EPA reinitiated and completed formal consultation with the Services for the September 30, 1998 modification of the MSGP. As a result of this consultation and in response to public comments on the modification, EPA updated the species list in Addendum H to include species that were listed or proposed for listing since the Addendum H list was originally compiled on March 31, 1995. EPA also

decided to expand the list to include all of the terrestrial (*i.e.*, non-aquatic) listed and proposed species in recognition that those species may be impacted by permitted activities such as the construction and operation of the BMPs. The September 30, 1998 MSGP modification included the species list updated as of July 8, 1998 (63 FR 52494). The species list is also being updated on a regular basis and an electronic copy of the list is available at the Office of Wastewater Management website at "<http://www.epa.gov/owm/esalst2.htm>". The information may also be obtained by contacting the Services. The permittee is responsible for obtaining the updated information.

Based on comments received on the proposed MSGP on March 30, 2000 (65 FR 17010), the final permit requires facility operators to consider only listed endangered or threatened species, and not species proposed to be listed. Further explanation for the change can be found in Section IX of this notice.

On August 10, 2000, EPA initiated informal consultation with FWS and NMFS on EPA's finding of no likelihood of adverse effect on threatened and endangered species and critical habitat resulting from issuance of MSGP-2000. On September 22, 2000 FWS concurred with EPA's finding.

To be eligible for coverage under today's reissued MSGP, facilities must review the updated list of species and their locations in conjunction with the Addendum A instructions for completing the application requirements under this permit. If an applicant determines that none of the species identified in the updated species list is found in the county in which the facility is located, then there is a likelihood of no jeopardy and they are eligible for permit coverage. Applicants must then certify that their storm water and allowable non-storm water discharges, and their discharge-related activities, are not likely to jeopardize species and will be granted MSGP permit coverage 48 hours after the date of the postmark on the envelope used to mail the NOI form, provided there are no other factors limiting permit eligibility.

If listed species are located in the same county as the facility seeking MSGP coverage, then the applicant must determine whether the species are in proximity to the storm water or allowable non-storm water discharges or discharge-related activities at the facility. A species is in proximity to a storm water or allowable non-storm water discharge when the species is located in the path or down gradient area through which or over which the

point source discharge flows from industrial activities to the point of discharge into the receiving water, and once discharged into the receiving water, in the immediate vicinity of, or nearby, the discharge point. A species is also in proximity if it is located in the area of a site where discharge-related activities occur. If an applicant determines there are no species in proximity to the storm water or allowable non-storm water discharges, or discharge-related activities, then there is no likelihood of jeopardizing the species and the applicant is eligible for permit coverage.

If species are in proximity to the storm water or allowable non-storm water discharges or discharge-related activities, as long as they have been considered as part of a previous ESA authorization of the applicant's activity, and the environmental baseline established in that authorization is unchanged, the applicant may be covered under the permit. The environmental baseline generally includes the past and present impacts of all Federal, state and private actions that were occurring at the time the initial NPDES authorization and current ESA section 7 action by EPA or any other federal agency was taken. Therefore, if a permit applicant has received previous authorization and nothing has changed or been added to the environmental baseline established in the previous authorization, then coverage under this permit will be provided.

In the absence of such previous authorization, if species identified in the updated species list are in proximity to the discharges or discharge-related activities, then the applicant must determine whether there is any likely jeopardy to the species. This is done by the applicant conducting a further examination or investigation, or an alternative procedure, as described in the instructions in Addendum A of the permit. If the applicant determines that there is no likely jeopardy to the species, then the applicant is eligible for permit coverage. If the applicant determines that there likely is, or will likely be any jeopardy, then the applicant is not eligible for MSGP coverage unless or until he or she can meet one of the other eligibility conditions.

All dischargers applying for coverage under the MSGP must provide in the application information on the Notice of Intent form: (1) A determination as to whether there are any listed species in proximity to the storm water or allowable non-storm water discharges or discharge related activity, and (2) (when

EPA receives approval from the Office of Management and Budget and issues the revised form) an indication of which option under Part 1.2.3.6.3 of the MSGP they claim eligibility for permit coverage, and (3) a certification that their storm water and allowable non-storm water discharges and discharge-related activities are not likely to jeopardize listed species, or are otherwise eligible for coverage due to a previous authorization under the ESA. Coverage is contingent upon the applicant's providing truthful information concerning certification and abiding by any conditions imposed by the permit.

Dischargers who cannot determine if they meet one of the endangered species eligibility criteria cannot sign the certification to gain coverage under the MSGP and must apply to EPA for an individual NPDES storm water permit. For facilities already covered by the 1995 MSGP, the deadline for the individual applications is the same as that for NOIs requesting coverage under the reissued MSGP (December 29, 2000). As appropriate, EPA will conduct ESA section 7 consultation when issuing such individual permits.

Regardless of the above conditions, EPA may require that a permittee apply for an individual NPDES permit on the basis of possible jeopardy to species or critical habitats. Where there are concerns that coverage for a particular discharger is not sufficiently protective of listed species, the Services (as well as any other interested parties) may petition EPA to require that the discharger obtain an individual NPDES permit and conduct an individual section 7 consultation as appropriate.

In addition, the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his/her authorized representative, or the U.S. Fish and Wildlife Service (as well as any other interested parties) may petition EPA to require that a permittee obtain an individual NPDES permit. The permittee is also required to make the SWPPP, annual site compliance inspection report, or other information available upon request to the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his/her authorized representative, or the U.S. Fish and Wildlife Service Regional Director, or his/her authorized representative.

These mechanisms allow for the broadest and most efficient coverage for the permittee while still providing for the most efficient protection of endangered species. They significantly reduce the number of dischargers that

must be considered individually and therefore allow the Agency and the Services to focus their resources on those discharges that are indeed likely to jeopardize listed species. Straightforward mechanisms such as these allow applicants more immediate access to permit coverage, and eliminates "permit limbo" for the greatest number of permitted discharges. At the same time it is more protective of endangered species because it allows both agencies to focus on the real problems, and thus, provide endangered species protection in a more expeditious manner.

D. New Storm Water Discharges to Water Quality-Impaired or Water Quality-Limited Receiving Waters

Today's final MSGP includes a new provision (Part 1.2.3.8) which establishes eligibility conditions with regard to discharges to water quality-limited or water quality-impaired waters. For the purposes of this permit, "water quality-impaired" refers to a stream, lake, estuary, etc. that is not currently meeting its assigned water quality standards. These waters are also referred to as "303(d) waters" due to the requirement under that section of the CWA for States to periodically list all state waters that are not meeting their water quality standards. "Water quality-limited waters" refers to waterbodies for which a State had to develop individual Total Maximum Daily Loads (TMDLs), a tool which helps waterbodies meet their water quality standards. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. Water quality standards are set by States, Territories, and Tribes. They identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The CWA, section 303, establishes the water quality standards and TMDL programs.

Prior to submitting a Notice of Intent, any new discharger (see 40 CFR 122.2) to a 303(d) waterbody must be able to demonstrate compliance with 40 CFR 122.4(i). In essence, you are a new discharger if your facility started discharging after August 13, 1979 and your storm water was not previously permitted. Any discharger to a waterbody for which there is an approved TMDL must confirm that the TMDL allocated a portion of the load for storm water point source discharges. These provisions apply only to discharges containing the pollutant(s)

for which the waterbody is impaired or the TMDL developed.

Part 1.2.3.8.1 (which applies to new storm water discharges and not to existing discharges) is designed to better ensure compliance with NPDES regulations at 40 CFR 122.4(i), which include certain special requirements for new discharges into impaired waterbodies. Lists of impaired waterbodies (sometimes referred to as 303(d) waterbodies) may be obtained from appropriate State environmental offices or their internet sites. NPDES regulations at 40 CFR 122.4(i) prohibit discharges unless it can be shown that:

1. There are sufficient remaining pollutant load allocations to allow for the discharge; and
2. The existing dischargers into that segment are subject to compliance schedules designed to bring the segments into compliance with applicable water quality standards.

Part 1.2.3.8.2 (which applies to both new and existing storm water discharges) is designed to better ensure compliance with NPDES regulations at 40 CFR 122.4(d), which requires compliance with State water quality standards. The eligibility condition prohibits coverage of new or existing discharges of a particular pollutant where there is a TMDL, unless the discharge is consistent with the TMDL. Lists of waterbodies with TMDLs may be obtained from appropriate State environmental offices or their internet sites and from EPA's TMDL internet site at <http://www.epa.gov/owow/tmdl/index.html>.

E. Storm Water Discharges Subject to Anti-Degradation Provisions of Water Quality Standards

Part 1.2.3.9 of today's final MSGP includes a new provision which clarifies that discharges which do not comply with applicable anti-degradation provisions of State water quality standards are not eligible for coverage under the MSGP. This eligibility condition is designed to better ensure compliance with NPDES regulations at 40 CFR 122.4(d), which requires compliance with State water quality standards. Anti-degradation provisions may be obtained from the appropriate State environmental office or their internet sites.

F. Storm Water Discharges Previously Covered by an Individual Permit

The 1995 MSGP contained general prohibitions on coverage where a discharge was covered by another NPDES permit (Part I.B.3.d) and where a permit had been terminated other than at the request of the permittee (Part

I.B.3.e.). It was therefore possible to obtain coverage by requesting termination of an individual permit and then submitting an NOI for coverage under the MSGP. This could be desirable from both the discharger's and EPA's perspective for a variety of reasons, for example, where a wastewater permit included storm water outfalls, but the wastewater outfalls had been eliminated. Being able to use the general permit would reduce the application cost to the permittee and the administrative burden of permit issuance to the Agency. Today's permit clarifies the conditions under which transfer from an individual permit to this general permit would be acceptable (Part 1.2.3.3.2).

In order to avoid conflict with the anti-backsliding provisions of the CWA, transfer from an individual permit to the MSGP will only be allowed where both of the following conditions are met:

- The individual permit did not contain numeric water quality-based effluent limitations developed for the storm water component of the discharge; and
- The permittee includes any specific BMPs for storm water required under the individual permit in their storm water pollution prevention plan.

Implementation of a comprehensive Storm Water Pollution Prevention Plan for the entire facility (as opposed to selected outfalls in an individual permit) and compliance with all other conditions of the MSGP is deemed to be at least as stringent a technology-based permit limit as the conditions of the individual permit. This assumption is only made where the previous permit did not contain any specific water quality-based effluent limitations on storm water discharges (e.g., storm water contained high levels of zinc and the individual permit contained a zinc limit developed to ensure compliance with the State water quality criteria).

G. Requiring Coverage Under an Individual Permit or an Alternate General Permit

Part 9.12 of today's final MSGP provides that EPA may require an individual permit or coverage under a separate general permit instead of today's MSGP. This is in accord with NPDES regulations at 40 CFR 122.28(b)(3). These regulations also provide that any interested party may petition EPA to take such an action. The issuance of the individual permit or alternate general permit would be in accordance with 40 CFR Part 124 and would provide for public comment and appeal of any final permit decision. The circumstances in which such an action

would be taken are set forth at 40 CFR 122.28(b)(3).

VI. Summary of Common Permit Conditions

The following section describes the permit conditions common to discharges from all the industrial activities covered by today's final MSGP. These conditions are largely the same as the conditions of the 1995 MSGP.

A. Notification Requirements

General permits for storm water discharges associated with industrial activity must require the submission of a Notice of Intent (NOI) prior to the authorization of such discharges (see 40 CFR 122.28(b)(2)(i), April 2, 1992 (57 FR 11394)). Consistent with these regulatory requirements, today's final MSGP establishes NOI requirements. These requirements apply to facilities currently covered by the 1995 MSGP, as well as new facilities seeking coverage. EPA made minor modifications to the NOI form to allow the discharger, the Agency and the public to more easily determine sector-specific conditions that will apply to the facility. Further modifications proposed on March 30, 2000 (65 FR 17010) require review and approval by the Office of Management and Budget under the Paperwork Reduction Act. EPA will have all appropriate approvals in place prior to requiring the use of the expanded NOI form. In the interim the NOI form with the minor modifications, contained in this notice, is in effect.

The information requirements of the revised NOI form are described below:

1. Content of NOI

a. An indication of which permit the operator is filing the NOI for (e.g., a facility in New Hampshire would be filing for coverage under permit NHR05*###, a facility located on Navajo Reservation lands in New Mexico under the AZR05*##I permit, a private contractor operating a federal facility in Colorado that is not located on Indian Country lands under the COR05*##F permit, etc.);

b. The name, address, and telephone number of the operator filing the NOI for permit coverage;

c. An indication of whether the owner of the site is a Federal, State, Tribal, private, or other public entity;

d. The name (or other identifier), address, county, and latitude/longitude of the facility for which the NOI is submitted (latitude/longitude will be accepted in either degree-minute-second or decimal format);

e. An indication of whether the facility is located on Indian Country lands;

f. An indication of whether the facility is a federal facility operated by the federal government;

g. The name of the receiving water(s);

h. The name of the municipal

operator if the discharge is through a municipal separate storm sewer system prior to discharge to a water of the U.S.;

i. Up to four 4-digit Standard Industrial Classification (SIC) codes that best represent the principal products produced or services rendered, including hazardous waste treatment, storage, or disposal activities, land disposal facilities that receive or have received any industrial waste, steam electric power generating facilities, or treatment works treating domestic sewage;

j. Identification of applicable sector(s) in this permit, as designated in Table 1, for facility discharges associated with industrial activity the operator wishes to have covered under this permit;

k. Certification that a storm water pollution prevention plan (SWPPP) meeting the requirements of Part 4 has been developed (with a copy of the permit language in the SWPPP);

l. Based on the instructions in Addendum A, whether any listed threatened or endangered species, or designated critical habitat, are in proximity to the storm water discharges or storm water discharge-related activities to be covered by this permit;

m. Whether any historic property listed or eligible for listing on the National Register of Historic Places is located on the facility or in proximity to the discharge;

n. A signed and dated certification, signed by a authorized representative of the facility as detailed in Part 9.7 and maintained with the SWPPP that certifies the following:

I certify under penalty of law that I have read and understand the Part 1.2 eligibility requirements for coverage under the multi-sector storm water general permit including those requirements relating to the protection of endangered or threatened species or critical habitat. To the best of my knowledge, the storm water and allowable non-storm discharges authorized by this permit (and discharged related activities), are not likely and will not likely, jeopardize endangered or threatened species or critical habitat, or are otherwise eligible for coverage under Part 1.2.3.6 of the permit. To the best of my knowledge, I further certify that such discharges and discharge related activities do not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part 1.2.3.7 of the permit. I

understand that continued coverage under the multi-sector storm water general permit is contingent upon maintaining eligibility as provided for in Part 1.2.

Two additional components of the form pending approval by the Office of Management and Budget are:

- a. under which Part(s) of Part 1.2.3.6 (Endangered Species) the applicant is certifying eligibility and whether the FWS or NMFS was involved in making the determination of eligibility;
- b. under which Part(s) of Part 1.2.3.7 (Historic Properties) the applicant is certifying eligibility and whether the SHPO or THPO was involved in the determination of eligibility.

The NOI must be signed in accordance with the signatory requirements of 40 CFR 122.22. A complete description of these signatory requirements is provided in the instructions accompanying the NOI. Completed NOI forms must be submitted to the Storm Water Notice of Intent (4203), 1200 Pennsylvania Avenue NW., Washington, DC 20460.

In the future (but not at the present time), EPA may also allow alternate means of NOI submission (such as electronic submission). An alternate means of NOI submission may be used by operators provided EPA has informed the operator of the acceptability of the alternative.

2. Deadlines

For facilities currently covered by the 1995 MSGP, the deadline for submission of an NOI requesting coverage under the reissued MSGP is January 29, 2001 (90 days after expiration of the 1995 MSGP). For these facilities, the requirements of the 1995 MSGP are incorporated into today's MSGP and continue to apply during the interim period subsequent to the expiration of the 1995 MSGP, but prior to submission of the NOI requesting coverage under the reissued MSGP. In response to a question from some permittees, EPA wishes to clarify that there is no need to submit an NOT to rescind coverage under the 1995 MSGP.

Facilities currently covered by the 1995 MSGP who cannot immediately determine if they are eligible for coverage under today's reissued MSGP may nevertheless be covered for up to 270 days provided an application for an alternative permit is submitted within 90 days. This interim coverage allows permit coverage while the permittee assesses his eligibility for the reissued MSGP and, if necessary, still meet the 180 day lead time required for applications for individual permits.

For facilities commencing operations after reissuance of the MSGP, the NOI

must be submitted at least two days prior to the commencement of the new industrial activity. New operators of existing facilities must also submit the NOI at least two days prior to assuming operational control at existing facilities.

Dischargers who submit a complete NOI in accordance with the MSGP requirements are authorized to discharge storm water associated with industrial activity two days after the date the NOI is postmarked, unless otherwise notified by EPA. EPA may deny coverage under the MSGP and require submission of an individual NPDES permit application based on a review of the completeness and/or content of the NOI or other information (e.g., Endangered Species Act compliance, National Historic Preservation Act Compliance, water quality information, compliance history, history of spills, etc.). Where EPA requires a discharger authorized under the MSGP to apply for an individual NPDES permit (or an alternative general permit), EPA will notify the discharger in writing that a permit application (or different NOI) is required by an established deadline. Coverage under the MSGP will automatically terminate if the discharger fails to submit the required permit application in a timely manner. Where the discharger does submit a requested permit application, coverage under the MSGP will automatically terminate on the effective date of the issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee.

A discharger is not precluded from submitting an NOI at a later date than described above. However, in such instances, EPA may bring appropriate enforcement actions.

3. Municipal Separate Storm Sewer System Operator Notification

Operators of storm water discharges associated with industrial activity that discharge through a large or medium municipal separate storm sewer system (MS4) or a municipal system designated by the Director,¹ must (upon request of the MS4 operator) submit a copy of the NOI to the municipal operator of the system receiving the discharge. This requirement of today's MSGP differs from the 1995 MSGP which had

¹ The terms large and medium municipal separate storm sewer systems (systems serving a population of 100,000 or more) are defined at 40 CFR 122.26(b)(4) and (7). Some of the cities and counties in which these systems are found are listed in Appendices F, G, H, and I to 40 CFR Part 122. Other municipal systems have been designated by EPA on a case-by-case basis or have brought into the program based upon the 1990 Census.

required that a copy of the NOI be sent to the MS4 operator. Today's MSGP has been modified in this regard to reduce paperwork requirements, and in consideration of the fact that most large and medium MS4 operators already have good information concerning the industrial facilities discharging into their MS4s.

EPA wishes to ensure a coordinated program between EPA and operators of MS4s for controlling pollutants in storm water discharges associated with industrial activity which enter an MS4. Such a coordinated program was intended by EPA's original storm water permit application regulations of November 16, 1990 (55 FR 48063). Additional discussion of this matter can be found in the original proposed MSGP (58 FR 61146).

4. Notice of Termination

Where a discharger is able to eliminate the storm water discharges associated with industrial activity from a facility, the discharger may submit a Notice of Termination (NOT) form (or photocopy thereof) provided by the Director. Today's final MSGP also differs from the 1995 MSGP by requiring that an NOT be submitted within 30 days after one or both of the following two conditions having been met:

- a. a new owner/operator has assumed responsibility for the facility; or
- b. the permittee has ceased operations at the facility and there no longer are discharges of storm water associated with industrial activity from the facility;

A copy of the NOT and instructions for completing the NOT are included in Addendum E. The NOT form requires the following information:

- a. Name, mailing address, and location of the facility for which the notification is submitted. Where a street address for the site is not available, the location of the approximate center of the site must be described in terms of the latitude and longitude to the nearest 15 seconds, or the section, township and range to the nearest quarter;
- b. The name, address and telephone number of the operator addressed by the Notice of Termination;
- c. The NPDES permit number for the storm water discharge associated with industrial activity identified by the NOT;
- d. An indication of whether the storm water discharges associated with industrial activity have been eliminated or the operator of the discharges has changed; and
- e. The following certification:

I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are

authorized by an NPDES general permit have been eliminated or that I am no longer the operator of the industrial activity. I understand that by submitting this Notice of Termination I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by an NPDES permit. I also understand that the submission of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

NOTs are to be sent to the Storm Water Notice of Termination (4203), 1200 Pennsylvania Avenue NW., Washington, DC 20460.

The NOT must be signed in accordance with the signatory requirements of 40 CFR 122.22. A complete description of these signatory requirements is provided in the instructions accompanying the NOT.

5. Conditional Exclusion for No Exposure

Today's final MSGP includes a special provision (Part 1.5 of the permit) which provides that a facility may discontinue permit coverage if the facility determines that it is eligible for the "no exposure" permit exemption which was created by EPA as part of the promulgation of the Phase II storm water regulations (64 FR 68722). A notice of termination is not required to discontinue permit coverage under these circumstances. However, in accordance with the Phase II regulations, a no exposure certification must be filed with the permitting authority.

It should also be noted that facilities operating under the existing MSGP are eligible, as of the effective date of the Phase II regulations, to submit no exposure certifications immediately if they meet the criteria for no exposure. No exposure certification renewals must be submitted five years from the time they are first submitted (assuming the facility still qualifies for the exemption). If conditions change at a facility such that renewed MSGP coverage is needed, the facility may submit an NOI requesting renewed coverage.

In response to comments on this matter, EPA has included a copy of the "No Exposure" form and instructions as Addendum F to today's permit.

EPA has also prepared a new guidance document entitled "Guidance Manual for Conditional Exclusion from Storm Water Permitting Based on "No Exposure" of Industrial Activities to Storm Water" to assist permittees in determining eligibility for the

exemption. This guidance document is available on EPA's storm water website. In addition, EPA recently conducted a mass mailing to permittees (as well as other stakeholder groups) alerting them to the no exposure exemption.

B. Special Conditions

The conditions of today's final MSGP have been designed to comply with the technology-based standards of the CWA (BAT/BCT). Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors and options for controlling pollutants in storm water discharges associated with industrial activity, the final MSGP lists a set of tailored requirements for developing and implementing storm water pollution prevention plans (SWPPPs) and, for selected discharges, numeric effluent limitations.² This is the same approach as in the 1995 MSGP.

Section VIII of the fact sheet for the 1995 MSGP summarized the industry-specific BMP options for controlling pollutants in storm water discharges associated with industrial activity for the various industrial sectors covered by the MSGP. Section VIII of today's fact sheet does not repeat the information from the 1995 fact sheet; however, updates are provided as appropriate.

Section VI.B.4 of today's fact sheet discusses the storm water discharges which are subject to numeric effluent limitations. For other discharges covered by the final MSGP, the permit conditions reflect EPA's decision to identify a number of BMP and traditional storm water management practices which prevent pollution in storm water discharges as the BAT/BCT level of control for the majority of storm water discharges covered by this permit. The permit conditions applicable to these discharges are not numeric effluent limitations, but rather are flexible requirements for developing and implementing site specific plans to minimize and control pollutants in storm water discharges associated with industrial activity.

EPA is authorized under 40 CFR 122.44(k)(2) to impose BMPs in lieu of numeric effluent limitations in NPDES

² Section 9.12.2 of the final MSGP provides that facility operators with storm water discharges associated with industrial activity who, based on an evaluation of site specific conditions, believe that the appropriate conditions of this permit do not adequately represent BAT and BCT requirements for the facility may submit to the Director an individual application (Form 1 and Form 2F). A detailed explanation of the reasons why the conditions of the available general permits do not adequately represent BAT and BCT requirements for the facility as well as any supporting documentation must be included.

permits when the Agency finds numeric effluent limitations to be infeasible. EPA may also impose BMPs which are "reasonably necessary * * * to carry out the purposes of the Act" under 40 CFR 122.44(k)(3). Both of these standards for imposing BMPs were recognized in *NRDC v. Costle*, 568 F.2d 1369, 1380 (D.C. Cir. 1977). The conditions in today's final MSGP are issued under the authority of both of these regulatory provisions. The pollution prevention or BMP requirements in today's final MSGP operate as limitations on effluent discharges that reflect the application of BAT/BCT. This is because the BMPs identified require the use of source control technologies which, in the context of the MSGP, are the best available of the technologies economically achievable (or the equivalent BCT finding). See *NRDC v. EPA*, 822 F.2d 104, 122-23 (D.C. Cir. 1987) (EPA has substantial discretion to impose nonquantitative permit requirements pursuant to Section 402(a)(1)). See also EPA's memorandum of August 1, 1996 entitled "Interim Permitting Approach for Water Quality-Based Effluent Limitations for Storm Water Discharges."

1. Prohibition of Non-storm Water Discharges

Today's final MSGP includes basically the same provisions pertaining to non-storm water discharges as the 1995 MSGP. Like the 1995 MSGP, today's MSGP does not authorize non-storm water discharges that are mixed with storm water except as provided below. Today's MSGP does authorize one additional non-storm water discharge: mist discharges which originate from cooling towers and which are deposited at an industrial facility and may be discharged. During the term of the 1995 MSGP, these discharges were brought to the attention of EPA with a request that the discharges be authorized under the reissued MSGP. The mist discharges are authorized under today's MSGP provided:

- a. The permittee has evaluated the potential for the discharges to be contaminated by chemicals used in the cooling tower and determined that the levels of such chemicals in the discharges would not cause or contribute to a violation of an applicable water quality standard; and
- b. The permittee has addressed this source of pollutants with appropriate BMPs in the SWPPP.

The other non-storm water discharges that are authorized under today's final MSGP are the same as those in the 1995 MSGP and include discharges from fire

fighting activities; fire hydrant flushings; potable water sources, including waterline flushings; irrigation drainage; lawn watering; routine external building washdown without detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; compressor condensate; uncontaminated ground water or spring water; and foundation or footing drains where flows are not contaminated with process materials such as solvents that are combined with storm water discharges associated with industrial activity. In response to a comment, the final MSGP includes "potable water sources, including waterline flushings" on the list of authorized non-storm water discharges, but deletes the reference to "drinking fountain water," which a commenter felt could conflict with local ordinances.

To be authorized under today's MSGP, these other sources of non-storm water (except flows from fire fighting activities) must be identified in the SWPPP prepared for the facility. (SWPPP requirements are discussed in more detail below). Where such discharges occur, the SWPPP must also identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

Today's final MSGP does not require pollution prevention measures to be identified and implemented for non-storm water flows from fire-fighting activities because these flows will generally be unplanned emergency situations where it is necessary to take immediate action to protect the public.

The prohibition of unpermitted non-storm water discharges in today's MSGP ensures that non-storm water discharges (except for those classes of non-storm water discharges that are conditionally authorized in Part 1.2.2.2 of the MSGP) are not inadvertently authorized by the permit. Where a storm water discharge is mixed with non-storm water that is not authorized by today's MSGP or another NPDES permit, the discharger should submit the appropriate application forms (Forms 1, 2C, and/or 2E) to gain permit coverage of the non-storm water portion of the discharge.

2. Releases of Reportable Quantities of Hazardous Substances and Oil

As discussed below, today's final MSGP includes the same provisions pertaining to releases of reportable quantities of hazardous substances and oil as the 1995 MSGP.

a. Today's final MSGP provides that the discharge of hazardous substances or oil from a facility must be eliminated or minimized in accordance with the SWPPP developed for the facility. Where a permitted storm water discharge contains a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under 40 CFR Part 117, or 40 CFR Part 302 during a 24-hour period, the following actions must be taken:

(1) Any person in charge of the facility that discharges hazardous substances or oil is required to notify the National Response Center (NRC) (800-424-8802; in the Washington, DC, metropolitan area, 202-426-2675) in accordance with the requirements of 40 CFR Part 117, and 40 CFR Part 302 as soon as they have knowledge of the discharge.

(2) The SWPPP for the facility must be modified within 14 calendar days of knowledge of the release to provide a description of the release, an account of the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and it must be modified where appropriate.

(3) The permittee must also submit to EPA within 14 calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and steps to be taken to modify the SWPPP for the facility.

b. Anticipated discharges containing a hazardous substance in an amount equal to or in excess of reporting quantities are those caused by events occurring within the scope of the relevant operating system. Facilities that have more than one anticipated discharge per year containing a hazardous substance in an amount equal to or in excess of a reportable quantity are required to:

(1) Submit notifications of the first release that occurs during a calendar year (or for the first year of this permit, after submission of an NOI); and

(2) Provide a written description in the SWPPP of the dates on which such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the releases. In addition, the SWPPP must address measures to minimize such releases.

c. Where a discharge of a hazardous substance or oil in excess of reporting quantities is caused by a non-storm

water discharge (e.g., a spill of oil into a separate storm sewer), that discharge is not authorized by the MSGP and the discharger must report the discharge as required under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302. In the event of a spill, the requirements of Section 311 of the CWA and other applicable provisions of Sections 301 and 402 of the CWA continue to apply. This approach is consistent with the requirements for reporting releases of hazardous substances and oil that make a clear distinction between hazardous substances typically found in storm water discharges and those associated with spills that are not considered part of a normal storm water discharge (see 40 CFR 117.12(d)(2)(i)).

3. Co-located Industrial Facilities

Like the 1995 MSGP, today's MSGP includes requirements pertaining to co-located industrial facilities. However, these requirements have been modified from the requirements of the 1995 MSGP to clarify their applicability. Co-located industrial activities occur when activities being conducted onsite fall into more than one of the categories of the industrial facilities listed in Part 1.2.1 of today's MSGP (e.g., a landfill at a wood treatment facility). Facilities operating under the 1995 MSGP have sometimes been unclear whether certain limited activities (e.g., minor vehicle maintenance activities at an industrial plant) would trigger the MSGP's requirements regarding co-located activities.

If you have co-located industrial activities on-site that are described in a sector(s) other than your primary sector, you must comply with all other applicable sector-specific conditions found in Part 6 for the co-located industrial activities. The extra sector-specific requirements are applied only to those areas of your facility where the extra-sector activities occur. An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations, and identified by today's MSGP SIC code list. For example, unless you are actually hauling substantial amounts of freight or materials with your own truck fleet or are providing a trucking service to outsiders, simple maintenance of vehicles used at your facility is unlikely to meet the SIC code group 42 description of a motor freight transportation facility. Even though Sector P may not apply, the runoff from your vehicle maintenance facility would likely still be considered storm water

associated with industrial activity. As such, your SWPPP must still address the runoff from the vehicle maintenance facility—although not necessarily with the same degree of detail as required by Sector P—but you would not be required to monitor as per Sector P.

In the event there truly are co-located activities at your facility, today's MSGP authorizes, as does the 1995 MSGP, all storm water discharges provided that your facility complies with all SWPPP and monitoring requirements for each co-located activity. By monitoring the discharges from the different industrial activities, you can better determine the effectiveness of your SWPPP for controlling all major pollutants of concern in your storm water discharges. However, if monitoring for the same parameter is required for more than one sector (and the different industrial activities drain to the same outfall), then only one sample analysis is required for that parameter.

4. Numeric Effluent Limitations

Today's MSGP retains the numeric effluent limitations which were included in the 1995 MSGP, and also includes the effluent limitations guidelines which EPA recently finalized for certain storm water discharges from new and existing hazardous and non-hazardous landfills (65 FR 3007, January 19, 2000). The new effluent limitations guidelines for these landfills are discussed in more detail in the Sections VIII.K and L of this fact sheet (Special Requirements for Discharges Associated with Industry Activities).

Today's MSGP retains the numeric effluent limitations from the 1995 MSGP for the following discharges: coal pile runoff (including runoff from steam electric power plants subject to 40 CFR Part 423 requirements), discharges from phosphate fertilizer manufacturing (40 CFR Part 418), asphalt paving and roofing emulsions (40 CFR Part 443), cement manufacturing materials storage pile runoff (40 CFR Part 411), and discharges resulting from the spray down of lumber and wood products storage yards (wet decking) (40 CFR Part 429). In addition, the final MSGP authorizes mine dewatering discharges from construction sand and gravel, industrial sand, and crushed stone facilities (40 CFR Part 436) in EPA Regions 1, 2, 3, 6, 8, 9, 10. The actual numeric effluent limitations can be found in Part 6 of the final MSGP.

5. Compliance with Water Quality Standards

The 1995 MSGP does not specifically address compliance with water quality standards (WQS), other than to exclude

from coverage discharges which may contribute to an exceedance of WQS. Today's final MSGP includes the same restriction on eligibility, and in Part 3.3 also includes certain requirements if exceedances occur for discharges covered by the MSGP. If a discharge authorized under the final MSGP is later discovered to cause, or have the reasonable potential to cause or contribute to, a violation of a WQS, the permitting authority will inform the permittee of the violation. The permittee must then take all necessary actions to ensure future discharges do not cause or contribute to the violation of WQS, and document these actions in the SWPPP. If violations remain or recur, coverage under the MSGP may be terminated by the permitting authority and an alternate permit issued. Today's final MSGP also clarifies that compliance with this requirement does not preclude enforcement actions as provided by the CWA for the underlying violation.

C. Common Storm Water Pollution Prevention Plan (SWPPP) Requirements

Like the 1995 MSGP, today's reissued MSGP requires that all facilities which intend to be covered by the MSGP for storm water discharges associated with industrial activity prepare and implement a SWPPP. The MSGP addresses pollution prevention plan requirements for a number of categories of industries. Following below is a discussion of the common permit requirements for all industries; special requirements for facilities subject to EPCRA Section 313 reporting requirements; and special requirements for facilities with outdoor salt storage piles. These are the permit requirements which apply to discharges associated with any of the industrial activities covered by today's final MSGP. These common requirements may be amended or further clarified in the industry-specific SWPPP requirements which are found in Part 6 of the final MSGP. These industry-specific requirements are additive for facilities where co-located industrial activities occur.

The Storm Water Pollution Prevention Plan (SWPPP) approach in today's final MSGP focuses on two major objectives: (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activity from the facility; and (2) ensure implementation of measures to minimize and control pollutants in storm water discharges associated with industrial activity from the facility.

The SWPPP requirements in today's final MSGP are intended to facilitate a process whereby the operator of the industrial facility thoroughly evaluates

potential pollution sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff. The process involves the following four steps: (1) formation of a team of qualified plant personnel who will be responsible for preparing the plan and assisting the plant manager in its implementation; (2) assessment of potential storm water pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent storm water contamination.

EPA believes the pollution prevention approach is the most environmentally sound and cost-effective way to control the discharge of pollutants in storm water runoff from industrial facilities. This position is supported by the results of a comprehensive technical survey EPA completed in 1979.³ The survey found that two classes of management practices are generally employed at industries to control the nonroutine discharge of pollutants from sources such as storm water runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup. Since publication of the 1979 survey, EPA has imposed management practices and controls in NPDES permits on a case-by-case basis. The Agency also has continued to review the appropriateness and effectiveness of such practices,⁴ as well as the

³ See "Storm Water Management for Industrial Activities," EPA, September 1992, EPA-832-R-92-006.

⁴ For example, see "Best Management Practices: Useful Tools for Cleaning Up," Thron, H. Rogoszewski, P., 1982, Proceedings of the 1982 Hazardous Material Spills Conference; "The Chemical Industries' Approach to Spill Prevention," Thompson, C., Goodier, J., 1980, Proceedings of the 1980 National Conference of Control of Hazardous Materials Spills; a series of EPA memoranda entitled "Best Management Practices in NPDES Permits—Information Memorandum," 1983, 1985, 1986, 1987, 1988; Review of Emergency Systems: Report to Congress," EPA, 1988; and "Analysis of Implementing

techniques used to prevent and contain oil spills.⁵ Experience with these practices and controls has shown that they can be used in permits to reduce pollutants in storm water discharges in a cost-effective manner. In keeping with both the present and previous administration's objective to attain environmental goals through pollution prevention, pollution prevention has been and continues to be the cornerstone of the NPDES permitting program for storm water. EPA has developed guidance entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," September 1992, to assist permittees in developing and implementing pollution prevention measures.

Note: The discussions of the SWPPP requirements are grouped in subject areas and do not follow the exact order of the permit conditions.

1. Pollution Prevention Team (Part 4.2.1)

As a first step in the process of developing and implementing a SWPPP, permittees are required to identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited storm water pollution potential).

2. Description of the Facility and Potential Pollution Sources (Part 4.2.2)

Each SWPPP must describe activities, materials, and physical features of the facility that may contribute significant

amounts of pollutants to storm water runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or storm water drainage systems that drain the facility. This assessment of storm water pollution risk will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Some operators may find that significant amounts of pollutants are running onto the facility property. Such operators should identify and address the contaminated runoff in the SWPPP. If the runoff cannot be addressed or diverted by the permittee, the permitting authority should be notified. If necessary, the permitting authority may require the operator of the adjacent facility to obtain a permit.

Part 6 of the final MSGP includes industry-specific requirements for the various industry sectors covered by today's permit. All SWPPPs generally must describe the following elements:

a. *Description of the Facility Site and Receiving Waters/Wetlands (Parts 4.2.2 and 4.2.3):* The plan must contain a map of the site that shows the location of outfalls covered by the permit (or by other NPDES permits), the pattern of storm water drainage, an indication of the types of discharges contained in the drainage areas of the outfalls, structural features that control pollutants in runoff,⁶ surface water bodies (including wetlands), places where significant materials⁷ are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the date of the submission of an NOI to be covered under this permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal. For areas of the facility that generate storm water discharges with a

reasonable potential to contain significant amounts of pollutants, the map must indicate the probable direction of storm water flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion also must be identified. In order to increase the readability of the map, the inventory of the types of discharges contained in each outfall may be kept as an attachment to the site map.

b. *Summary of Potential Pollutant Sources (Part 4.2.4):* The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., biochemical oxygen demand, suspended solids, etc.) associated with each source.

c. *Significant Spills and Leaks (Part 4.2.5):* The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the three years prior to the date of the submission of an NOI to be covered under this permit. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

The listing should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar such spills or leaks in the future. This effort will aid the facility operator as she or he examines existing spill prevention and response procedures and develops any additional

Permitting Activities for Storm Water Discharges Associated with Industrial Activity," EPA, 1991.

⁵ See for example, "The Oil Spill Prevention, Control and Countermeasures Program Task Force Report," EPA, 1988; and "Guidance Manual for the Development of an Accidental Spill Prevention Program," prepared by SAIC for EPA, 1986.

⁶ Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

⁷ Significant materials include, but are not limited to the following: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials, such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products, such as ashes, slag, and sludge that have the potential to be released with storm water discharges. (See 40 CFR 122.26(b)(8)).

procedures necessary to fulfill the requirements set forth in Parts 4 and 6 of the final permit.

d. *Allowable and Prohibited Non-storm Water Discharges (Part 4.4)*: Each SWPPP must include a certification, signed by an authorized individual, that discharges from the site have been tested or evaluated for the presence of non-storm water discharges. The certification must describe possible significant sources of non-storm water, the results of any test and/or evaluation conducted to detect such discharges, the test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the onsite drainage points directly observed during the test or evaluation. Acceptable test or evaluation techniques include dye tests, television surveillance, observation of outfalls or other appropriate locations during dry weather, water balance calculations, and analysis of piping and drainage schematics.⁸

Except for flows that originate from fire fighting activities, sources of non-storm water that are specifically identified in the permit as being eligible for authorization under the general permit must be identified in the plan. SWPPPs must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water discharge.

EPA recognizes that certification may not be feasible where facility personnel do not have access to an outfall, manhole, or other point of access to the conduit that ultimately receives the discharge. In such cases, the plan must describe why certification was not feasible. Permittees who are not able to certify that discharges have been tested or evaluated must notify the Director in accordance with Part 4.4 of the final MSGP.

e. *Sampling Data (Part 4.2.6)*: Any existing data on the quality or quantity of storm water discharges from the facility must be described in the plan, including data collected for Part 2 of the group application process. These data may be useful for locating areas that have contributed pollutants to storm water. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

⁸In general, smoke tests should not be used for evaluating the discharge of non-storm water to a separate storm sewer as many sources of non-storm water typically pass through a trap that would limit the effectiveness of the smoke test.

3. Selection and Implementation of Storm Water Controls (Part 4.2.7, et al.)

Following completion of the source identification and assessment phase, the permit requires the permittee to evaluate, select, and describe the pollution prevention measures, BMPs, and other controls that will be implemented at the facility. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

EPA emphasizes the implementation of pollution prevention measures and BMPs that reduce possible pollutant discharges at the source. Source reduction measures include, among others, preventive maintenance, chemical substitution, spill prevention, good housekeeping, training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutant discharges, EPA supports the use of source control measures and BMPs such as material segregation or covering, water diversion, and dust control. Like source reduction measures, source control measures and BMPs are intended to keep pollutants out of storm water. The remaining classes of BMPs, which involve recycling or treatment of storm water, allow the reuse of storm water or attempt to lower pollutant concentrations prior to discharge.

The SWPPP must discuss the reasons each selected control or practice is appropriate for the facility and how each will address one or more of the potential pollution sources identified in the plan. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems. The permit requirements included for the various industry sectors in Part 6 of today's final MSGP generally require that the portion of the plan that describes the measures and controls address the following minimum components.

When "minimize/reduce" is used relative to SWPPP measures, EPA means to consider and implement BMPs that will result in an improvement over the baseline conditions as it relates to the levels of pollutants identified in storm water discharges with due consideration

to economic feasibility and effectiveness.

a. *Nonstructural Controls*:

- **Good Housekeeping.** Good housekeeping involves using practical, cost-effective methods to identify ways to maintain a clean and orderly facility and keep contaminants out of separate storm sewers. It includes establishing protocols to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. These protocols must be described in the plan and communicated to appropriate plant personnel.

- **Minimizing Exposure.** Where practicable, protecting potential pollutant sources from exposure to storm water is an important control option. Pollutants that are never allowed to contaminate storm water do not require development of "treatment" type BMPs. Elimination of all exposure to storm water may also make the facility eligible for the "No Exposure Certification" exclusion from permitting at 40 CFR 122.26(g)

- **Preventive Maintenance.** Permittees must develop a preventive maintenance program that involves regular inspection and maintenance of storm water management devices and other equipment and systems. The program description should identify the devices, equipment, and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair, or replacement of devices, equipment, and systems. For storm water management devices such as catch basins and oil/water separators, the preventive maintenance program should provide for periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and systems, the program should reveal and enable the correction of conditions that could cause breakdowns or failures that may result in the release of pollutants.

- **Spill Prevention and Response Procedures.** Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and, in the event of a spill, enable proper and timely response. Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be described in the plan. For a spill

prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.

- **Routine Inspections.** In addition to the comprehensive site evaluation, facilities are required to conduct periodic inspections of designated equipment and areas of the facility. Industry-specific requirements for such inspections, if any, are set forth in Part 6 of the final MSGP. When required, qualified personnel must be identified to conduct inspections at appropriate intervals specified in the plan. A set of tracking or follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained. These periodic inspections are different from the comprehensive site evaluation, even though the former may be incorporated into the latter. Equipment, area, or other inspections are typically visual and are normally conducted on a regular basis, e.g., daily inspections of loading areas. Requirements for such periodic inspections are specific to each industrial sector in today's permit, whereas the comprehensive site compliance evaluation is required of all industrial sectors. Area inspections help ensure that storm water pollution prevention measures (e.g., BMPs) are operating and properly maintained on a regular basis. The comprehensive site evaluation is intended to provide an overview of the entire facility's pollution prevention activities. Refer to Part VI.C.3.h. below for more information on the comprehensive site evaluation.

- **Employee Training.** The SWPPP must describe a program for informing personnel at all levels of responsibility of the components and goals of the SWPPP. The training program should address topics such as good housekeeping, materials management, and spill response procedures. Where appropriate, contractor personnel also must be trained in relevant aspects of storm water pollution prevention. A schedule for conducting training must be provided in the plan. Several sections in Part 6 of today's final MSGP specify a minimum frequency for training of once per year. Others indicate that training is to be conducted at an appropriate interval. EPA recommends that facilities conduct training annually at a minimum. However, more frequent training may be necessary at facilities with high turnover of employees or where employee participation is essential to

the storm water pollution prevention plan.

b. *Structural Controls:*

- **Sediment and Erosion Control.** The SWPPP must identify areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. The plan must identify measures that will be implemented to limit erosion in these areas.

- **Management of Runoff.** The plan must contain a narrative evaluation of the appropriateness of traditional storm water management practices (i.e., practices other than those that control pollutant sources) that divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce the discharge of pollutants. Appropriate measures may include, among others, vegetative swales, collection and reuse of storm water, inlet controls, snow management, infiltration devices, and wet detention/retention basins.

c. *Example BMPs:* Part 4.2.7.2.2 includes a list of example BMPs that could be considered for use in a SWPPP, for example: detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). These examples are not intended to limit the creativity of facility operators in developing alternative BMPs or applications for BMPs that increase cost effectiveness.

d. *Selection of Controls:* Based on the results of the evaluation, the plan must identify practices that the permittee determines are reasonable and appropriate for the facility. The plan also should describe the particular pollutant source area or activity to be controlled by each storm water management practice. Reasonable and appropriate practices must be implemented and maintained according to the provisions prescribed in the plan.

In selecting storm water management measures, it is important to consider the potential effects of each method on other water resources, such as ground water. Although storm water pollution prevention plans primarily focus on storm water management, facilities must also consider potential ground water pollution problems and take appropriate steps to avoid adversely affecting ground water quality. For example, if the water table is unusually high in an area, an infiltration pond may contaminate a ground water source unless special preventive measures are taken. Under EPA's July 1991 Ground Water Protection Strategy, States are

encouraged to develop Comprehensive State Ground Water Protection Programs (CSGWPP). Efforts to control storm water should be compatible with State ground water objectives as reflected in CSGWPPs.

e. *Other Controls:* Today's final MSGP includes a new requirement that no solid materials, including floating debris may be discharged to waters of the United States, except as authorized by a permit under Section 404 of the Clean Water Act. In addition, off-site tracking of raw, final, or waste materials or sediment, and the generation of dust must be minimized. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas must be minimized. These requirements are similar to requirements included in EPA's construction general storm water permit (63 FR 7858, February 17, 1998) which EPA believes would be appropriate for industrial facilities as well.

f. *Maintenance (Part 4.3):* All BMPs identified in the SWPPP must be maintained in effective operating condition.

g. *Controls for Allowable Non-Storm Water (Part 4.4.2):* Where an allowable non-storm water has been identified, appropriate controls for that discharge must be included in the permit. In many cases, the same types of controls for contaminated storm water would suffice, but the nature and volume of potential pollutants in the non-storm water discharges must be taken into consideration in selection of controls.

h. *Comprehensive Site Compliance Evaluation (Part 4.9):* Today's final MSGP requires that the SWPPP describe the scope and content of the comprehensive site evaluations that qualified personnel will conduct to (1) confirm the accuracy of the description of potential pollution sources contained in the plan, (2) determine the effectiveness of the plan, and (3) assess compliance with the terms and conditions of the permit. Note that the comprehensive site evaluations are not the same as periodic or other inspections described for certain industries in Section VI.C.3.d of this fact sheet. However, in the instances when frequencies of inspections and the comprehensive site compliance evaluation overlap, they may be combined allowing for efficiency as long as the requirements for both types of inspections are met. The plan must indicate the frequency of comprehensive evaluations which must be at least once a year, except where comprehensive site evaluations are shown in the plan to be impractical for inactive mining sites, due to remote

location and inaccessibility.⁹ The individual or individuals who will conduct the comprehensive site evaluation must be identified in the plan and should be members of the pollution prevention team. Material handling and storage areas and other potential sources of pollution must be visually inspected for evidence of actual or potential pollutant discharges to the drainage system. Inspectors also must observe erosion controls and structural storm water management devices to ensure that each is operating correctly. Equipment needed to implement the SWPPP, such as that used during spill response activities, must be inspected to confirm that it is in proper working order.

The results of each comprehensive site evaluation must be documented in a report signed by an authorized company official. The report must describe the scope of the comprehensive site evaluation, the personnel making the comprehensive site evaluation, the date(s) of the comprehensive site evaluation, and any major observations relating to implementation of the SWPPP. Comprehensive site evaluation reports must be retained for at least three years after the date of the evaluation. Based on the results of each comprehensive site evaluation, the description in the plan of potential pollution sources and measures and controls must be revised as appropriate within two weeks after each comprehensive site evaluation, unless indicated otherwise in Part 6 of the permit. If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm, or not more than 12 weeks after completion of the comprehensive site evaluation.

i. *Applicable State, Tribal, or Local Plans (Part 4.8)*: The SWPPP must be consistent with any applicable requirements of State, Tribal, or Local storm water, waste disposal, sanitary sewer or septic system regulations to the extent these apply to a facility and are more stringent than the requirements of this permit.

j. *Documentation of Permit Eligibility with Regards to ESA and NHPA Requirements (Parts 4.5 and 4.6)*: To better ensure compliance with the requirements of the ESA and NHPA, Parts 4.5 and 4.6 of today's final MSGP require that documentation be included with the SWPPP demonstrating permit

eligibility with regards to the requirements of the ESA and NHPA. The following information is required for the ESA:

- Information on whether listed endangered or threatened species, or critical habitat, are found in proximity to the facility;
- Whether such species may be jeopardized by the storm water discharges or storm water discharge-related activities;
- Results of the Addendum A endangered species screening determinations; and
- A description of measures necessary to protect listed endangered or threatened species, or critical habitat, including any terms or conditions that are imposed under the eligibility requirements of Part 1.2.3.6. The final MSGP notes that discharges from facilities which fail to describe and implement such measures are ineligible for coverage under the permit.

The following information is required for the NHPA determination:

- Information on whether the storm water discharges or storm water discharge-related activities would have an effect on a property that is listed or eligible for listing on the National Register of Historic Places;
- Where effects may occur, any written agreements which have been made with the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other Tribal leader to mitigate those effects;
- Results of the Addendum B historic places screening determinations; and
- A description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the National Register of Historic Places, including any terms or conditions that are imposed under the eligibility requirements of Part 1.2.3.7 of this permit. The final MSGP notes that discharges from facilities which fail to describe and implement such measures are ineligible for coverage under the permit.

k. *Keeping a Copy of the Permit with the SWPPP (Part 4.7)*: A new requirement to have a copy of the permit language in the SWPPP has been added to today's permit. The "confirmation" letter received from the NOI Processing Center is not the permit; it is essentially only the equivalent of a "receipt" for a facility's "registration" (NOI) to use the general permit. Since determining permit eligibility and preparing a SWPPP is required prior to obtaining permit coverage, a copy of the permit would be needed anyway. Requiring a copy of the permit in the SWPPP ensures that facility operators,

and not just whoever prepared the SWPPP, will have ready access to all permit requirements.

l. *Recordkeeping and Keeping the SWPPP Current (Parts 4.9.4, 4.10, et al.)*: Records must be kept with the SWPPP documenting the status and effectiveness of plan implementation. At a minimum, records must address results of the annual Comprehensive Site Compliance Evaluations, routine facility inspections, spills, monitoring, and maintenance activities. The plan also must describe a system that enables timely reporting of storm water management-related information to appropriate plant personnel. Inspectors or other enforcement officers will ask for records documenting permit compliance during inspections or facility compliance reviews.

The SWPPP must be updated whenever there is a change at the facility that would significantly affect the discharges authorized under the MSGP. The SWPPP must also be updated whenever monitoring results and/or an inspection by the permittee or by local, state, tribal, or federal officials indicate a portion of the SWPPP is proving to be ineffective in controlling storm water discharge quality.

m. *Signature, Plan Review, and Access to the SWPPP (Part 4.11)*: The SWPPP must be signed and certified in accordance with Part 7 of the permit. A copy of the SWPPP must be kept on site at the facility or be locally available for the use of the Director, a State, Tribe, or local agency (e.g., MS4 operator) at the time of an onsite inspection. The SWPPP must also be made available to the U.S. Fish and Wildlife Service or National Marine Fisheries Service upon request. Since SWPPPs are living documents that change over time, access to the current version of the SWPPP is critical in assessing permit compliance. Facilities are also required to provide a copy of the SWPPP to the public when requested in writing to do so.

The Director may notify you at any time that your SWPPP does not meet one or more of the minimum requirements of this permit. The notification will identify provisions of the permit which are not being met, as well as the required modifications. Required changes must be made within thirty (30) calendar days and a written certification submitted to the Director confirming that the changes were made.

EPA does not intend to require public comment on SWPPPs or hold public hearings. As noted above, EPA may require changes to a SWPPP when necessary and may consider concerns from the public in making such judgments. The MSGP also provides

⁹ Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to remote location and inaccessibility, site inspections must be conducted at least once every three years.

that individual permits may be required when the MSGP is inappropriate for a given facility. During the issuance of the individual permits, the public would have an opportunity to comment on the requirements of the permits.

4. Deadlines

Today's MSGP requires that permittees previously covered by the 1995 MSGP must update their SWPPPs to comply with any new requirements of today's MSGP by the date they submit their new NOIs. As noted earlier, the new NOIs are due January 29, 2001. However, a permittee may request an extension for the SWPPP update not to exceed 270 days from the expiration date of the 1995 MSGP.

D. Special Requirements

1. Special Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Requirements (Part 4.12)

Today's final MSGP replaces the special requirements of the 1995 MSGP for certain permittees subject to reporting requirements under Section 313 of the EPCRA (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA)) with a requirement to identify areas with these pollutants. EPCRA Section 313 requires operators of certain facilities that manufacture (including import), process, or otherwise use listed toxic chemicals to report annually their releases of those chemicals to any environmental media. Listed toxic chemicals include more than 500 chemicals and chemical classes listed at 40 CFR Part 372 (including the recently added chemicals published November 30, 1994).

By requiring identification of EPCRA 313 chemicals in the summary of potential pollutant sources under the Storm Water Pollution Prevention Plan (Part 4.2.4), the facility operator is then required to develop appropriate storm water controls for such areas (Part 4.2.7). EPA expects that many controls for EPCRA chemicals will continue to be driven by other state and federal environmental regulations such as Spill Prevention Control and Countermeasure (SPCC) plans required under Section 311 of the CWA, etc. as long as such a requirement is incorporated into the SWPPP.

This reduction in permit complexity by eliminating redundant requirements was requested by members of the regulated community.

2. Special Requirements for Storm Water Discharges Associated With Industrial Activity From Salt Storage Facilities

Today's MSGP retains the same special requirements as the 1995 MSGP for storm water discharges associated with industrial activity from salt storage facilities. Storage piles of salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. This requirement only applies to runoff from storage piles discharged to waters of the United States. Facilities that collect all the runoff from their salt piles and reuse it in their processes or discharge it subject to a separate NPDES permit do not need to enclose or cover their piles.

These special requirements have been included in today's permit based on human health and aquatic effects resulting from storm water runoff from salt storage piles compounded with the prevalence of salt storage piles across the United States.

3. Consistency With Other Plans

SWPPPs may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility as long as such requirement is incorporated into the SWPPP.

E. Monitoring and Reporting Requirements

Today's final MSGP retains the same monitoring requirements as the existing MSGP. Numerous comments were submitted on these monitoring requirements. A summary of EPA's responses to these comments and justification for retaining these requirements is contained in this section. A more detailed discussion is found in Section IX of this fact sheet (Summary of Responses to Comments). Responses to individual comments are contained in the Water Docket.

Like the 1995 MSGP, today's final MSGP includes three general types of monitoring: analytical monitoring or chemical monitoring; compliance monitoring for effluent guidelines compliance, and visual examinations of storm water discharges. A general description of each of these types of monitoring which was provided with the 1995 MSGP is repeated below.

1. Analytical Monitoring Requirements

Analytical monitoring requirements involve laboratory chemical analyses of samples collected by the permittee. The results of the analytical monitoring are quantitative concentration values for different pollutants, which can be easily compared to the results from other sampling events, other facilities, or to national benchmarks.

The categories of facilities subject to analytical monitoring in today's final MSGP are noted in Table 1 of this fact sheet. The MSGP requires analytical monitoring for the industry sectors or subsectors that demonstrated in the group application data a potential to discharge pollutants at concentrations of concern or, in certain State-specific cases, to satisfy those States' requirements. The data submitted with the group permit applications were reviewed by EPA to determine the industry sectors and subsectors listed in Table 1 of this fact sheet that are to be subject to analytical monitoring requirements. First, EPA divided the Part 1 and Part 2 application data by the industry sectors listed in Table 1. Where a sector was found to contain a wide range of industrial activities or potential pollutant sources, it was further subdivided into the industry subsectors listed in Table 1. Next, EPA reviewed the information submitted in Part 1 of the group applications regarding the industrial activities, significant materials exposed to storm water, and the material management measures employed. This information helped identify potential pollutants that may be present in the storm water discharges. Then EPA entered into a database the sampling data submitted in Part 2 of the group applications. Those data were arrayed according to industrial sector and subsector for the purposes of determining when analytical monitoring would be appropriate.

To conduct a comparison of the results of the statistical analyses to determine when analytical monitoring would be required, EPA established "benchmark" concentrations for the pollutant parameters on which monitoring results had been received. The "benchmarks" are the pollutant concentrations above which EPA determined represent a level of concern. The level of concern is a concentration at which a storm water discharge could potentially impair, or contribute to impairing, water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by EPA as a level that, if below, a facility presents little potential for water quality concern. As such, the benchmarks also

provide an appropriate level to determine whether a facility's storm water pollution prevention measures are successfully implemented. The benchmark concentrations are not effluent limitations and should not be interpreted or adopted as such. These values are merely levels which EPA has used to determine if a storm water discharge from any given facility merits further monitoring to ensure that the

facility has been successful in implementing a SWPPP. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility. Table 3 lists the parameter benchmark values and the sources used for the benchmarks. Two changes from the 1995 MSGP are the addition of benchmark values for total Cyanide and Total Magnesium.

Benchmark values for the two parameters were included in the Fact Sheet of the 1995 MSGP at Table K-3, but were inadvertently not included in the general listing of parameter benchmark values (Table 5 of the Fact Sheet for the 1995 MSGP). Additional information explaining the derivation of the benchmarks can be found in the fact sheet for the 1995 MSGP (60 FR 50825).

TABLE 3.—PARAMETER BENCHMARK VALUES

Parameter name	Benchmark level	Source
Biochemical Oxygen Demand (5 day)	30 mg/L	4
Chemical Oxygen Demand	120 mg/L	5
Total Suspended Solids	100 mg/L	7
Oil and Grease	15 mg/L	8
Nitrate + Nitrite Nitrogen	0.68 mg/L	7
Total Phosphorus	2.0 mg/L	6
pH	6.0–9.0 s.u.	4
Acrylonitrile (c)	7.55 mg/L	2
Aluminum, Total (pH 6.5–9)	0.75 mg/L	1
Ammonia	19 mg/L	1
Antimony, Total	0.636 mg/L	9
Arsenic, Total (c)	0.16854 mg/L	9
Benzene	0.01 mg/L	10
Beryllium, Total (c)	0.13 mg/L	2
Butylbenzyl Phthalate	3 mg/L	3
Cadmium, Total (H)	0.0159 mg/L	9
Chloride	860 mg/L	1
Copper, Total (H)	0.0636 mg/L	9
Cyanide, Total	0.0636 mg/l	9
Dimethyl Phthalate	1.0 mg/L	11
Ethylbenzene	3.1 mg/L	3
Fluoranthene	0.042 mg/L	3
Fluoride	1.8 mg/L	6
Iron, Total	1.0 mg/L	12
Lead, Total (H)	0.0816 mg/L	1
Magnesium, Total	0.0636 mg/l	9
Manganese	1.0 mg/L	13
Mercury, Total	0.0024 mg/L	1
Nickel, Total (H)	1.417 mg/L	1
PCB–1016 (c)	0.000127 mg/L	9
PCB–1221 (c)	0.10 mg/L	10
PCB–1232 (c)	0.000318 mg/L	9
PCB–1242 (c)	0.00020 mg/L	10
PCB–1248 (c)	0.002544 mg/L	9
PCB–1254 (c)	0.10 mg/L	10
PCB–1260 (c)	0.000477 mg/L	9
Phenols, Total	1.0 mg/L	11
Pyrene (PAH,c)	0.01 mg/L	10
Selenium, Total (*)	0.2385 mg/L	9
Silver, Total (H)	0.0318 mg/L	9
Toluene	10.0 mg/L	3
Trichloroethylene (c)	0.0027 mg/L	3
Zinc, Total (H)	0.117 mg/L	1

Sources:

1. "EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater.
2. "EPA Recommended Ambient Water Quality Criteria." LOEL Acute Freshwater.
3. "EPA Recommended Ambient Water Quality Criteria." Human Health Criteria for Consumption of Water and Organisms.
4. Secondary Treatment Regulations (40 CFR 133).
5. Factor of 4 times BOD5 concentration—North Carolina benchmark.
6. North Carolina storm water benchmark derived from NC Water Quality Standards.
7. National Urban Runoff Program (NURP) median concentration.
8. Median concentration of Storm Water Effluent Limitation Guideline (40 CFR Part 419).
9. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18.
10. Laboratory derived Minimum Level (ML).
11. Discharge limitations and compliance data.
12. "EPA Recommended Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater.
13. Colorado—Chronic Aquatic Life Freshwater—Water Quality Criteria.

Notes:

- (*) Limit established for oil and gas exploration and production facilities only.
(c) carcinogen.

(H) hardness dependent.
 (PAH) Polynuclear Aromatic Hydrocarbon.
 Assumptions:
 Receiving water temperature - 20 C.
 Receiving water pH - 7.8.
 Receiving water hardness CaCO₃ 100 mg/L.
 Receiving water salinity 20 g/kg
 Acute to Chronic Ratio (ACR) - 10.

EPA prepared a statistical analysis of the sampling data for each pollutant parameter reported within each sector or subsector. (Only where EPA did not subdivide an industry sector into subsectors was an analysis of the entire sector's data performed.) The statistical analysis was performed assuming a delta log normal distribution of the sampling data within each sector/subsector. The analyses calculated median, mean, maximum, minimum, 95th, and 99th percentile concentrations for each parameter. The results of the analyses can be found in the appropriate section of Section VIII of the fact sheet accompanying the 1995 MSGP. From this analysis, EPA was able to identify pollutants for further evaluation within each sector or subsector.

EPA next compared the median concentration of each pollutant for each sector or subsector to the benchmark concentrations listed in Table 3. EPA also compared the other statistical results to the benchmarks to better ascertain the magnitude and range of the discharge concentrations to help identify the pollutants of concern. EPA did not conduct this analysis if a sector had data for a pollutant from less than three individual facilities. Under these circumstances, the sector or subsector would not have this pollutant identified as a pollutant of concern. This was done to ensure that a reasonable number of facilities represented the industry sector or subsector as a whole and that the analysis did not rely on data from only one facility.

For each industry sector or subsector, parameters with a median concentration higher than the benchmark level were considered pollutants of concern for the industry and identified as potential pollutants for analytical monitoring under today's permit. EPA then analyzed the list of potential pollutants to be monitored against the lists of significant materials exposed and industrial activities which occur within each industry sector or subsector as described in the Part I application information. Where EPA could identify a source of a potential pollutant which is directly related to industrial activities of the industry sector or subsector, the permit identifies that parameter for analytical monitoring. If EPA could not identify a source of a potential pollutant

which was associated with the sector/subsector's industrial activity, the permit does not require monitoring for the pollutant in that sector/subsector. Industries with no pollutants for which the median concentrations are higher than the benchmark levels are not required to perform analytical monitoring under this permit, with the exceptions explained below.

In addition to the sectors and subsectors identified for analytical monitoring using the methods described above, EPA determined, based upon a review of the degree of exposure, types of materials exposed, special studies and in some cases inadequate sampling data in the group applications, that the following industries also warrant analytical monitoring notwithstanding the absence of data on the presence or absence of certain pollutants in the group applications: Sector K (hazardous waste treatment storage and disposal facilities), and Sector S (airports which use more than 100,000 gallons per year of glycol-based fluids or 100 tons of urea for deicing). Today's final MSGP retains the monitoring requirements of the 1995 MSGP due to the high potential for contamination of storm water discharge which EPA believes was not adequately characterized by group applicants in the information they provided in the group application process. Like the 1995 MSGP, exemptions for today's MSGP would be on a pollutant-by-pollutant and outfall-by-outfall basis.

As part of the reissuance process for today's MSGP, EPA evaluated Discharge Monitoring Reports (DMRs) submitted by facilities for analytical monitoring conducted during the second and fourth year of the 1995 MSGP. The purpose of the evaluation was to evaluate any trends in the monitoring results. One factor common to almost all industrial sectors, however, was that the number of DMRs submitted for the year-four monitoring period far exceeded the number of DMRs submitted for the year-two monitoring period. For the second-year monitoring period, EPA received 380 DMRs, whereas 1377 DMRs were received for the fourth-year monitoring period. For example, the number of Sector M (Auto Salvage Yards) facilities that submitted monitoring results for total suspended solids from the second year monitoring period was roughly 26;

the number of DMRs submitted for the fourth year monitoring for the same industrial sector and parameter was 240. As a result, EPA could not conduct the trends analysis it intended to perform.

While the exact reason for the significant increase in the number of DMRs received in year 4 of the permit (as compared to year 2) is unknown, EPA suspects it is related to the administrative extension of EPA's 1992 baseline general permit. Although the 1992 general permit expired in September 1997, the permit was administratively extended. It was not until December 28, 1998 that facilities previously covered under EPA's baseline industrial permit were required to obtain coverage under the MSGP. As a result, facilities previously covered under the baseline industrial permit were not required to conduct analytical monitoring (as required in the second year of the 1995 MSGP). In essence, the fourth-year monitoring data set EPA received represents the baseline of pollutant discharge information under the sector-specific industrial general storm water permit.

Based on the information received during the public comment period and the DMRs received, EPA believes it is premature to make any final conclusions regarding the value of the Agency's acquisition of the monitoring data or to consider dropping the monitoring. EPA is retaining quarterly analytic monitoring requirements for storm water discharges as per the 1995 MSGP for all sectors previously identified. Comparison of pollutant levels against benchmark levels is still regarded as one of the important tools operators must use to evaluate their facilities' storm water pollution prevention plans (SWPPPs) and best management practices (BMPs). Facilities' discharge monitoring reports (DMRs) are also vital to the Agency for use in characterizing an industrial sector's discharges. EPA has not, and does not, intend for pollutant levels above the benchmark values to mean a facility is out of compliance with the MSGP-2000.

While today's permit retains the analytical monitoring requirements of the 1995 MSGP, the Agency continues to support the position that any analytical monitoring program required

under the MSGP needs to be structured so that it provides useful information to facility operators, EPA and the general public on the effectiveness of Storm Water Pollution Prevention Plans. EPA commits to using data from the 1995 and 2000 permits to evaluate the effectiveness of management practices on an industry sector basis and to evaluate the need for changes in monitoring protocols for the next permit. The Agency will work with program stakeholders in conducting the evaluation and may seek to implement certain changes possibly on a pilot basis.

Like the 1995 MSGP, today's MSGP requires that all facilities, save for Sector G, within an industry sector or subsector identified for analytical monitoring must, at a minimum, monitor their storm water discharges quarterly during the second year of permit coverage, unless the facility exercises the Alternative Certification described in Section VI.E.3 of this fact sheet. At the end of the second year of coverage under the current permit, a facility is required to calculate the average concentration for each parameter for which the facility is required to monitor. If the average concentration for a pollutant parameter is less than or equal to the benchmark value, then the permittee is not required to conduct analytical monitoring for that pollutant during the fourth year of the permit. If, however, the average concentration for a pollutant is greater than the benchmark value, then the permittee is required to conduct quarterly monitoring for that pollutant during the fourth year of permit coverage. Analytical monitoring is not required during the first, third, and fifth year of the permit. When average concentrations exceed benchmark levels, facilities are encouraged to conduct more monitoring if appropriate to identify additional management practices which may be necessary to include in their SWPPP. The exclusion from analytical monitoring in the fourth year of the permit was conditional on the facility maintaining industrial operations and BMPs that will ensure a quality of storm water discharges consistent with the average concentrations recorded during the second year of the permit. For purposes of the above monitoring, year 2 runs from October 1, 2001 to September 30, 2002; year 4 runs from October 1, 2003 to September 30, 2004.

EPA acknowledges that, considering the small number of samples required per monitoring year (four), and the vagaries of storm water discharges, it may be difficult to determine or confirm

the existence of a discharge problem as a commenter claimed. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job. EPA believes there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness.

Commenters also had concerns that only four samples and variability in conditions severely reduce the utility of monitoring results for judging BMP effectiveness. While not practicable for EPA to require an increase in monitoring, operators are encouraged to sample more frequently to improve the statistical validity of their results. Unless the proper data acquisition protocol for making a valid BMP effectiveness determination is rigorously followed, any other method used to assess BMP effectiveness would be qualitative, and therefore less reliable. The least subjective approach, and most beneficial to operators and stakeholders, EPA believes, remains a combination of visual and analytic monitoring, using analyte benchmark levels to target potential problems. Statistical uncertainties inherent in the monitoring results will necessitate both operators and EPA exercising best professional judgement in interpreting the results. As stated above, when viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job.

Commenters had additional concerns regarding impacts of storm water on water quality standards and that monitoring has marginal value in assessing and protecting water quality. In the absence of establishing discharge pollutant levels that correlate directly to water quality standards, as would be done for an individual permit, EPA settled on benchmark levels which would, under nearly all scenarios, be protective of water quality standards. Recognizing the shortcomings of these generic pollutant levels, EPA only intends for them to be used as indicators of possible problems and as a flag to reevaluate the SWPPP and possibly the operation of the facility—not as a trigger to begin mandatory SWPPP or operational revisions (unless, after

employing BPJ, the operator deems such revisions are necessary).

Monitoring results also serve as an oversight tool for EPA to prioritize sites which may benefit from a site inspection. A requirement to submit test results serves as an incentive for the facility operator to perform the monitoring and take any necessary action based on the results.

Some commenters felt the validity of benchmark values need to be reevaluated. Universal WQ-based discharge levels for storm water cannot be established; the next best thing would be to determine water segment-specific total maximum daily loads (TMDLs) for these discharges. But when benchmarks are employed merely as indicators, without requiring specific corrective actions beyond using best professional judgement to reassess present conditions and make any changes deemed necessary, the present benchmarks are adequate. In many cases operators can, upon receipt of analytic monitoring results above benchmarks, still conclude their present SWPPPs/BMPs are adequately protective of water quality, or that other situations such as discharging to low-quality, ephemeral streams may obviate the need for SWPPP/BMP revisions.

The fact that storm water discharge pollutant levels could be affected by atmospheric/dry deposition, run on and fate in transport, as well as structural sources, was a concern of a few commenters. EPA acknowledges the potential for adding pollutants to a facility's discharges from external or structural sources. Permittees are, nonetheless, still legally responsible for the quality of all discharges from their sites (or any runoff that comes into contact with their structures, industrial activities or materials, regardless of where these are located)—but not from pollutants that may be introduced into their discharges outside the boundaries of their properties. Pollutant levels, whether elevated from air deposition, run-on from nearby sites, or leachate from on-site structures, remain the responsibility of permittees. This was affirmed in the ruling by the Environmental Appeals Board against the General Motors Corporation CPC-Pontiac Fiero Plant in December 1997.

a. *Other Monitoring Options:* There were various comments for and against various alternatives to quarterly analytic monitoring submitted. The other non-analytic monitoring options are summarized in the following paragraphs, along with EPA responses.

b. *Visual Monitoring:* Numerous commenters supported dropping analytic monitoring from the MSGP—

2000 in favor of just requiring quarterly visual monitoring. Commenters claimed visual monitoring is adequate to ensure compliance and environmental protection (especially coupled with training), and is least burdensome.

Quarterly visual monitoring of storm water discharges has always been a permit requirement, for many of the same reasons why commenters favor it, and will continue to be so. EPA will also be retaining analytic monitoring because we believe the best way to ensure SWPPP effectiveness and protection of water quality is through a combination of visual and analytic monitoring. The reasons for not adopting visual monitoring only are explained further in the rationale for justifying quarterly analytic monitoring.

c. Annual Reporting: One option suggested by commenters was for an annual report, possibly using a standardized form, to be submitted to EPA detailing the permittee's SWPPP highlights and revisions/additions, inspections, compliance evaluations, visual monitoring results, etc. This information is already required to be documented in a facility's SWPPP, which, if deemed necessary, must be provided to EPA on demand. One comment against this option stated that the volume of data submitted would be too great for the Agency to evaluate. Other opponents to this option indicated that the reports would not contain enough information to evaluate SWPPP effectiveness, ensure water quality protection, or provide the information necessary to make long-term management plans. Commenters in support of the annual report concept held that it would provide a record of the permittee's commitment to storm water control, was better for evaluating SWPPP effectiveness, and would provide information to EPA to determine if sampling or a site inspection is needed.

If no monitoring data were available, an annual report could be used to ensure that a facility is implementing its SWPPP. The reports could also be used to prioritize sites for inspection. However, EPA agrees that it would be very burdensome to review all the reports and very difficult to assess the effectiveness of a facility's SWPPP based on that review alone. The subjectivity inherent in annual reporting makes it a undesirable substitute for analytic monitoring. Documenting the kind of information in the annual report is already a SWPPP requirement, and is therefore available to operators for assessing and improving their storm water programs. For these reasons, EPA will not require reports containing

essentially the same information required in SWPPPs to be submitted in lieu of analytic monitoring.

d. Group Monitoring: Commenters also suggested group monitoring. In this option a consortium of like permittees would do sampling at one facility, possibly on a rotating basis. The sample results would represent all the facilities in the consortium. A variation of group monitoring is for the consortium to retain a consultant to do representative sampling and provide storm water program guidance and evaluations. Supporters of this concept said it may allow for comparisons of effectiveness of different SWPPP practices (e.g., sweeping vs. catchment basin for solids control). One commenter pointed out that the feasibility of the group concept is suspect due to the fact that individual facilities may have different topography, soil and other natural conditions. EPA believes that technically valid BMP comparisons could be done under this type of program. However, it would be difficult and very resource-intensive for EPA to establish criteria for group eligibility and then monitor to ensure that groups met these criteria.

e. Watershed Monitoring: This option involves replacing the monitoring of discrete storm water discharges with ambient receiving water monitoring on a watershed basis. Watershed monitoring is invaluable to making real conclusions regarding storm water impacts of water quality, and will be employed in making total maximum daily load (TMDL). However, watershed monitoring cannot replace facility-specific storm water discharge monitoring to determine the loads contributed by the facilities and to evaluate the effectiveness of the SWPPP.

f. Monitoring Only in Impaired Waters: Several commenters supported requiring monitoring only in impaired water bodies and for pollutants that cause the impairment. Although this option would focus attention on the problem water bodies and possible pollutant sources, EPA and a commenter point out that not all impaired water bodies and their impairments have been determined. The goal of EPA's storm water program is also to protect and maintain water quality, not just remediate impaired waters, so focusing on impaired waters only does not fulfill all the program's responsibilities.

2. Compliance Monitoring

Today's final MSGP retains the same compliance monitoring requirements as the 1995 MSGP, and also includes compliance monitoring requirements for certain storm water discharges from new

and existing hazardous and non-hazardous landfills. As noted earlier, EPA has recently finalized effluent limitations guidelines for these landfills (65 FR 3007, January 19, 2000) and the compliance monitoring is required to ensure compliance with the guidelines. These discharges must generally be sampled annually (in some cases quarterly) and tested for the parameters which are limited by the permit. Discharges subject to compliance monitoring include (in addition to the landfills discharges): coal pile runoff, contaminated runoff from phosphate fertilizer manufacturing facilities, runoff from asphalt paving and roofing emulsion production areas, material storage pile runoff from cement manufacturing facilities, and mine dewatering discharges from crushed stone, construction sand and gravel, and industrial sand mines located in EPA Regions 1, 2, 3, 6, 8, 9, 10. All samples are to be grabs taken within the first 30 minutes of discharge where practicable, but in no case later than the first hour of discharge. Where practicable, the samples shall be taken from the discharges subject to the numeric effluent limitations prior to mixing with other discharges.

Monitoring for these discharges is required to determine compliance with numeric effluent limitations. Discharges covered under today's final MSGP which are subject to numeric effluent limitations are not eligible for the alternative certification described in Section VI.E.3 of this fact sheet.

Where a State or Tribe has imposed a numeric effluent limitation as a condition for certification under CWA § 401, a default minimum monitoring frequency of once per year has been included in the final permit. This default monitoring frequency would only apply if a State failed to provide a monitoring frequency along with their conditional § 401 certification.

3. Alternate Certification

Today's final MSGP retains the provision in the 1995 MSGP for an alternative certification in lieu of analytical monitoring. The MSGP includes monitoring requirements for facilities which the Agency believes have the potential for contributing significant levels of pollutants to storm water discharges. The alternative certification described below is included in the permit to ensure that monitoring requirements are only imposed on those facilities which do, in fact, have storm water discharges containing pollutants at concentrations of concern. EPA has determined that if there are no sources of a pollutant

exposed to storm water at the site then the potential for that pollutant to contaminate storm water discharges does not warrant monitoring.

A discharger is not subject to the analytical monitoring requirements provided the discharger makes a certification for a given outfall, on a pollutant-by-pollutant basis, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity that are located in areas of the facility that are within the drainage area of the outfall are not presently exposed to storm water and will not be exposed to storm water for the certification period. Such certification must be retained in the SWPPP, and submitted to EPA in lieu of monitoring reports required under Part 7 of the permit. The permittee is required to complete any and all sampling until the exposure is eliminated. If the facility is reporting for a partial year, the permittee must specify the date exposure was eliminated. If the permittee is certifying that a pollutant was present for part of the reporting period, nothing relieves the permittee from the responsibility to sample that parameter up until the exposure was eliminated and it was determined that no significant materials remained. This certification is not to be confused with the low concentration sampling waiver. The test for the application of this certification is whether the pollutant is exposed, or can be expected to be present in the storm water discharge. If the facility does not and has not used a parameter, or if exposure is eliminated and no significant materials remain, then the facility can exercise this certification.

As noted above, the MSGP does not allow facilities with discharges subject to numeric effluent limitations guidelines to submit alternative certification in lieu of compliance monitoring requirements. The permit also does not allow air transportation facilities or hard rock mines subject to the analytical monitoring requirements in Part 6 of the final MSGP to exercise an alternative certification.

A facility is not precluded from exercising the alternative certification in lieu of analytical monitoring requirements in the second or fourth year of the reissued MSGP, even if that facility has failed to qualify for a low concentration waiver thus far. EPA encourages facilities to eliminate exposure of industrial activities and significant materials where practicable.

4. Reporting and Retention Requirements

Like the 1995 MSGP, today's final MSGP requires that permittees submit all analytical monitoring results obtained during the second and fourth year of permit coverage. As noted earlier, year 2 runs from October 1, 2001 to September 30, 2002; year 4 runs from October 1, 2003 to September 30, 2004. Monitoring results must be submitted by January 28, 2003 for year 2 monitoring and January 28, 2005 for year 4 monitoring.

For each outfall, one Discharge Monitoring Report (DMR) form must be submitted per storm event sampled. For facilities conducting monitoring beyond the minimum requirements, an additional DMR form must be filed for each analysis. The permittee must include a measurement or estimate of the total precipitation, volume of runoff, and peak flow rate of runoff for each storm event sampled. Permittees subject to compliance monitoring requirements are required to submit all compliance monitoring results annually by October 28 following each annual sampling period (which run from October 1 of each year to September 30 of the following year). Compliance monitoring results must be submitted on signed DMR forms. For each outfall, one DMR form must be submitted for each storm event sampled.

Permittees are not required to submit records of the visual examinations of storm water discharges unless specifically asked to do so by the Director. Records of the visual examinations must be maintained at the facility. Records of visual examination of storm water discharge need not be lengthy. Permittees may prepare typed or hand written reports using forms or tables which they may develop for their facility. The report need only document: the date and time of the examination; the name of the individual making the examination; and any observations of color, odor, clarity, floating solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.

The address for submission of DMR forms for today's final MSGP is as follows: MSGP DMR (4203), U.S. EPA, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.

Under the 1995 MSGP, DMRs had been sent to the EPA Regional Offices. However, to facilitate review of all DMRs from facilities operating under the MSGP, the final MSGP requires that they be sent to the one location specified above.

Today's final MSGP also retains the requirement in the 1995 MSGP that permittees submit signed copies of DMRs to the operator of a large or medium MS4 (those which serve a population of 100,000 or more), if there are discharges of storm water associated with industrial activity through the MS4.

The location for submission of all reports (other than DMRs) for today's final MSGP remains the EPA Regional Offices as found in Part 8.3 of the final permit. Consistent with Office of Management and Budget Circular A-105, facilities located on the following Federal Indian Reservations, which cross EPA Regional boundaries, should note that permitting authority for such lands is consolidated in one single EPA Region.

a. Duck Valley Reservations lands, located in Regions 9 and 10, are handled by Region 9.

b. Fort McDermitt Reservation lands, located in Regions 9 and 10, are handled by Region 9.

c. Goshute Reservation lands, located in Regions 8 and 9, are handled by Region 9.

d. Navajo Reservation lands, located in Regions 6, 8, and 9, are handled by Region 9.

e. Ute Mountain Reservation lands, located in Regions 6 and 8, are handled Region 8.

Pursuant to the requirements of 40 CFR 122.41(j), today's MSGP (like the 1995 MSGP) requires permittees to retain all records for a minimum of three years from the date of the sampling, examination, or other activity that generated the data.

5. Sample Type

Today's final MSGP retains the same requirements regarding the type of sampling as the 1995 MSGP. A general description is provided below. Certain industries have different requirements. Permittees should check the industry-specific requirements in Part 6 of the final permit to confirm these requirements. Grab samples may be used for all monitoring unless otherwise stated. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval may be waived by the permittee where the preceding measurable storm event did not result in a measurable discharge from the facility. The 72-hour requirement may also be waived by the permittee where the permittee

documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample must be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger must submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. A minimum of one grab is required. Where the discharge to be sampled contains both storm water and non-storm water, the facility shall sample the storm water component of the discharge at a point upstream of the location where the non-storm water mixes with the storm water, if practicable.

6. Representative Discharge

Today's MSGP retains the same provision as the 1995 MSGP regarding substantially identical outfalls which allows a facility to reduce its overall monitoring burden. This representative discharge provision provides facilities with multiple storm water outfalls, a means for reducing the number of outfalls that must be sampled and analyzed. This may result in a substantial reduction of the resources required for a facility to comply with analytical monitoring requirements. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one such outfall and report that the quantitative data also apply to the substantially identical outfalls provided that the permittee includes in the SWPPP a description of the location of the outfalls and detailed explanation why the outfalls are expected to discharge substantially identical effluent. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (e.g., low (under 40 percent), medium (40 to 65 percent) or high (above 65 percent)) shall be provided in the plan. Facilities that select and sample a representative discharge are prohibited from changing the selected discharge in future monitoring periods unless the selected discharge ceases to be representative or is eliminated. Permittees do not need EPA approval to claim discharges are

representative, provided they have documented their rationale within the SWPPP. However, the Director may determine the discharges are not representative and require sampling of all non-identical outfalls.

The representative discharge provision in the permit is available to almost all facilities subject to the analytical monitoring requirements (not including compliance monitoring for effluent guideline limit compliance purposes) and to facilities subject to visual examination requirements.

The representative discharge provisions described above are consistent with Section 5.2 of NPDES Storm Water Sampling Guidance Document (EPA 833-B-92-001, July 1992).

7. Sampling Waiver

Today's final MSGP retains the same provisions for sampling waivers (as discussed below) which are found in the 1995 MSGP:

a. *Adverse Weather Conditions.* Today's final MSGP allows for temporary waivers from sampling based on adverse climatic conditions. This temporary sampling waiver is only intended to apply to insurmountable weather conditions such as drought or dangerous conditions such as lightning, flash flooding, or hurricanes. These events tend to be isolated incidents and should not be used as an excuse for not conducting sampling under more favorable conditions associated with other storm events. The sampling waiver is not intended to apply to difficult logistical conditions, such as remote facilities with few employees or discharge locations which are difficult to access. When a discharger is unable to collect samples within a specified sampling period due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate qualifying event in the next sampling period as well as a sample for the routine monitoring required in that period. Both samples should be analyzed separately and the results of that analysis submitted to EPA. Permittees are not required to obtain advance approval for sampling waivers.

b. *Unstaffed and Inactive Sites—Chemical Sampling Waiver.* Today's final MSGP allows for a waiver from sampling for facilities that are both inactive and unstaffed. This waiver is only intended to apply to these facilities where lack of personnel and locational impediments hinder the ability to conduct sampling (i.e., the ability to meet the time and representative rainfall sampling specifications). This waiver is not intended to apply to remote

facilities that are active and staffed, or to facilities with just difficult logistical conditions. When a discharger is unable to collect samples as specified in this permit, the discharger shall certify to the Director in the DMR that the facility is unstaffed and inactive and the ability to conduct samples within the specifications is not possible. Permittees are not required to obtain advance approval for this waiver.

c. *Unstaffed and Inactive Sites—Visual Monitoring Waiver.* Today's final MSGP allows for a waiver from sampling for facilities that are both inactive and unstaffed. This waiver is only intended to apply to these facilities where lack of personnel and locational impediments hinder the ability to conduct visual examinations (i.e., the ability to meet the time and representative rainfall sampling specifications). This monitoring waiver is not intended to apply to remote facilities that are active and staffed, or to facilities with just difficult logistical conditions. When a discharger is unable to perform visual examinations as specified in this permit, the discharger shall maintain on site with the pollution prevention plan a certification stating that the facility is unstaffed and inactive and the ability to perform visual examinations within the specifications is not possible. Permittees are not required to obtain advance approval for visual examination waivers.

8. Quarterly Visual Examination of Storm Water Quality

Today's final MSGP retains the requirements of the 1995 MSGP for quarterly visual examinations of storm water discharges which EPA continues to believe provide a useful and inexpensive means for permittees to evaluate the effectiveness of their SWPPPs (with immediate feedback) and make any necessary modifications to address the results of the visual examinations. All sectors of today's final MSGP are required to conduct these examinations. In the 1995 MSGP all sectors except Sector S (which covers air transportation) were required to conduct the examinations.

Basically, the MSGP requires that grab samples of storm water discharges be taken and examined visually for the presence of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen or other obvious indicators of storm water pollution. The grab samples must be taken within the first 30 minutes after storm water discharges begin, or as soon as practicable, but not longer than 1 hour after discharges begin. The sampling must be conducted quarterly during the

following time periods: January–March, April–June, July–September and October–December of each year. The reports summarizing these quarterly visual storm water examinations must be maintained on-site with the SWPPP.

The examination of the sample must be made in well lit areas. The visual examination is not required if there is insufficient rainfall or snow-melt to run off or if hazardous conditions prevent sampling. Whenever practicable the same individual should carry out the collection and examination of discharges throughout the life of the permit to ensure the greatest degree of consistency possible in recording observations.

When conducting a storm water visual examination, the pollution prevention team, or team member, should attempt to relate the results of the examination to potential sources of storm water contamination on the site. For example, if the visual examination reveals an oil sheen, the facility personnel (preferably members of the pollution prevention team) should conduct an inspection of the area of the site draining to the examined discharge to look for obvious sources of spilled oil, leaks, etc. If a source can be located, then this information allows the facility operator to immediately conduct a clean-up of the pollutant source, and/or to design a change to the SWPPP to eliminate or minimize the contaminant source from occurring in the future.

Other examples include: if the visual examination results in an observation of floating solids, the personnel should carefully examine the solids to see if they are raw materials, waste materials or other known products stored or used at the site. If an unusual color or odor is sensed, the personnel should attempt to compare the color or odor to the colors or odors of known chemicals and other materials used at the facility. If the examination reveals a large amount of settled solids, the personnel may check for unpaved, unstabilized areas or areas of erosion. If the examination results in a cloudy sample that is very slow to settle out, the personnel should evaluate the site draining to the discharge point for fine particulate material, such as dust, ash, or other pulverized, ground, or powdered chemicals.

To be most effective, the personnel conducting the visual examination should be fully knowledgeable about the SWPPP, the sources of contaminants on the site, the industrial activities conducted exposed to storm water and the day to day operations that may cause unexpected pollutant releases.

If the visual examination results in a clean and clear sample of the storm

water discharge, this may indicate that no pollutants are present. This would be an indication of a high quality result. However, the visual examination will not provide information about dissolved contamination. If the facility is in a sector or subsector required to conduct analytical (chemical) monitoring, the results of the chemical monitoring, if conducted on the same sample, would help to identify the presence of any dissolved pollutants and the ultimate effectiveness of the Storm Water Pollution Prevention Plan. If the facility is not required to conduct analytical monitoring, it may do so if it chooses to confirm the cleanliness of the sample.

While conducting the visual examinations, personnel should constantly be attempting to relate any contamination that is observed in the samples to the sources of pollutants on site. When contamination is observed, the personnel should be evaluating whether or not additional BMPs should be implemented in the SWPPP to address the observed contaminant and, if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance. Permittees may also conduct more frequent visual examinations than the minimum quarterly requirement, if they so choose. By doing so, they may improve their ability to ascertain the effectiveness of their plan. Using this guidance, and employing a strong knowledge of the facility operations, EPA believes that permittees should be able to maximize the effectiveness of their storm water pollution prevention efforts through conducting visual examinations which give direct, frequent feedback to the facility operator or pollution prevention team on the quality of the storm water discharge.

EPA believes that this quick and simple assessment will help the permittee to determine the effectiveness of his/her plan on a regular basis at very little cost. Although the visual examination cannot assess the chemical properties of the storm water discharged from the site, the examination will provide meaningful results upon which the facility may act quickly. EPA recommends that the visual examination be conducted at different times than the chemical monitoring, but is not requiring this. In addition, more frequent visual examinations can be conducted if the permittee so chooses. In this way, better assessments of the effectiveness of the Storm Water Pollution Prevention Plan can be achieved. The frequency of this visual examination will also allow for timely adjustments to be made to the plan. If

BMPs are performing ineffectively, corrective action must be implemented. A set of tracking or followup procedures must be used to ensure that appropriate actions are taken in response to the examinations. The visual examination is intended to be performed by members of the pollution prevention team. This hands-on examination will enhance the staff's understanding of the site's storm water problems and the effects of the management practices that are included in the plan.

F. Regional Offices

1. Notice of Intent Address

Notices of Intent to be authorized to discharge under the MSGP should be sent to: Storm Water Notice of Intent (4203), USEPA, 401 M Street, SW., Washington, DC 20460.

2. EPA Regional Office Addresses and Contacts

For further information, please call the appropriate EPA Regional storm water contacts listed below:

- ME, MA, NH, Indian country in CT, MA, ME, RI, and Federal Facilities in VT

EPA Region 1, Office of Ecosystem Protection, JFK Federal Building (CMU), Boston, MA 02203, Contact: Thelma Murphy (617) 918-1615.

- PR

U.S. EPA, Region 2, Caribbean Environmental Protection Division, Centro Europa Building, 1492 Ponce de Leon Avenue, Suite 417, San Juan, Puerto Rico 00907-4127, Contact: Sergio Bosques (787) 729-6951.

- DC and Federal Facilities in DE

EPA Region 3, Water Protection Division, (3WP13), Storm Water Staff, 841 Chestnut Building, Philadelphia, PA 19107, Contact: Cheryl Atkinson (215) 814-3392.

- Indian country in FL

EPA Region 4, Water Management Division, Surface Water Permits Section (SWPFB), 61 Forsyth Street, SW, Atlanta, GA 30303-3104, Contact: Floyd Wellborn (404) 562-9296.

- NM; Indian country in LA, OK, TX and NM (Except Navajo and Ute Mountain Reservation Lands); oil and gas exploration and production related industries, and pipeline operations in OK (which under State law are regulated by the Oklahoma Corporation Commission and not the Oklahoma Department of Environmental Quality); and oil and gas sites in TX.

EPA Region 6, NPDES Permits Section (6WQ-PP), 1445 Ross Avenue, Dallas, TX 75202-2733, Contact: Brent Larsen (214) 665-7523.

- Federal facilities in the State of Colorado; Indian country in CO, ND, SD, WY and UT (except Goshute and Navajo Reservation lands); Ute Mountain Reservation lands in CO and NM; and Pine Ridge Reservation lands in SD and NE.

EPA Region 8, Ecosystems Protection Program (8EPR-EP), 999 18th Street, Suite 300, Denver, CO 80202-2466 Contact: Vern Berry (303) 312-6234.

- AZ, American Samoa, Commonwealth of Northern Mariana Islands, Johnston Atoll, Guam, Midway Island and Wake Island; all Indian country in AZ, CA, and NV; those portions of the Duck Valley, Fort McDermitt and Goshute Reservations that are outside NV; those portions of the Navajo Reservation that are outside AZ.

EPA Region 9, Water Management Division, (WTR-5), Storm Water Staff, 75 Hawthorne Street, San Francisco, CA 94105, Contact: Eugene Bromley (415) 744-1906.

- ID; Indian country in AK, ID (except the Duck Valley Reservation), OR (except the Fort McDermitt Reservation), and WA; and Federal facilities in WA

EPA Region 10, Office of Water (OW-130), Storm Water Staff, 1200 Sixth Avenue, Seattle, WA 98101, Contact: Misha Vakoc (206) 553-6650 (toll-free in Region 10 states: 800-424-4372, extension 6650).

VII. Cost Estimates for Common Permit Requirements

Cost estimates for the MSGP were included with the final fact sheet accompanying the issuance of the MSGP on September 29, 1995 and are not being repeated here. However, additional costs for facilities seeking coverage under the reissued MSGP should be minor since the new MSGP includes few changes from the 1995 MSGP.

VIII. Special Requirements for Discharges Associated With Specific Industrial Activities

Section VIII of the fact sheet accompanying the 1995 MSGP included a detailed description of the industrial sectors covered by the permit, sources of pollutants from the different types of industries, available industry-specific BMPs, and a description of the industrial-specific permit requirements. As noted previously, EPA is not repeating all this information due to its considerable length. Table 1 in Section IV of this fact sheet listed the industrial sectors and subsectors covered by today's final MSGP. For today's MSGP, EPA reviewed the various sectors and subsectors to determine whether additional BMP opportunities have been identified subsequent to the issuance of the 1995 MSGP which would be appropriate to include in the reissued MSGP.

To update the various sectors and subsectors, EPA reviewed a variety of sources of information. As noted in Section VI.C of this fact sheet, pollution prevention is the cornerstone of the NPDES storm water permit program and, as such, EPA focused on new pollution prevention opportunities in updating the sectors. EPA has several ongoing programs directed toward identifying additional pollution prevention opportunities for different industrial sectors. One example is the "sector notebooks" which EPA's Office of Compliance has published covering 28 different industries, including many of those covered by the MSGP. EPA's Design for the Environment Program and Common Sense Initiative are additional examples. States, municipalities, industry trade associations and individual companies have also been active in recent years in trying to identify additional pollution prevention opportunities for different types of industries.

In reviewing the new information, however, EPA has identified only a few sectors where there appear to be additional storm water BMPs which would be appropriate for the reissued MSGP. For many industries, while considerable work has been conducted to reduce the environmental effects of these industries, little of the work has focused specifically on storm water. Rather, the efforts have focused more in areas such as manufacturing process changes to reduce hazardous waste generation or to reduce pollutant discharges in process wastewater. Where additional storm water BMPs have been identified and incorporated into the reissued MSGP, these new

requirements are discussed below by sector. In some sectors, additional language clarifying the permit requirements has been added and these changes are also discussed below.

A. Sectors C—Chemical and Allied Products Facilities

Industry-specific requirements for the manufacture of fertilizer from leather scraps (SIC 2873) was moved from Sector Z (Leather Tanning and Finishing) to Sector C. This change places the requirements for SIC 2873 in the same sector as other manufacturers of fertilizers.

B. Sector G—Metal Mining (Ore Dressing and Mining)

To clarify the applicability of the MSGP regarding construction activity at metal mining sites and to make metal mining requirements consistent with mineral mining provisions (Sector J), Sector G has been modified to indicate that earth-disturbing activities occurring in the "exploration and construction phase" of a mining operation must be covered under EPA's Construction General Permit (63 FR 7858, February 17, 1998) if the area disturbed is one acre or more. All mining exploration/construction operations of less than one acre must be covered under the MSGP-2000.

Today's MSGP also incorporates the MSGP modifications of August 7, 1998 (63 FR 42534) regarding storm water discharges from waste rock and overburden piles. On October 10, 1995, the National Mining Association challenged the interpretation set forth in Table G-4 of the 1995 MSGP that runoff from waste rock and overburden piles would categorically be considered mine drainage subject to effluent limitations guidelines (ELGs) at 40 CFR Part 440. The litigation was settled on August 7, 1998 with a revised interpretation by EPA of the applicability of the ELGs which is incorporated into today's MSGP. Under the revised interpretation, runoff from waste rock and overburden piles is not subject to ELGs unless it naturally drains (or is intentionally diverted) to a point source and combines with "mine drainage" that is otherwise subject to the ELGs.

The August 7, 1998 modification of the MSGP provided permit coverage for storm water discharges from waste rock and overburden piles which are not subject to ELGs. However, due to concerns regarding potential pollutants in the discharges, additional monitoring requirements were included in the permit to determine the pollutant concentrations in the discharges. These monitoring requirements are also

included in today's MSGP. The monitoring results which have been submitted to EPA pursuant to these requirements were also considered in determining the monitoring requirements for today's permit for this sector.

Concerns were expressed by some commenters over the use of the term "Numeric limitation" in the headings in the tables in Sector G in the proposed MSGP. However, since there are no actual numeric limitations in the tables, EPA believes this concern is not justified and the final MSGP has not been modified in response to these comments. In response to other comments, the revised Table G-4 from the August 7, 1998 MSGP modification has been added to the permit in Part 6.G.

In response to comments received on the proposed MSGP, the language in Part 6.G.1.6.6 of the final MSGP was modified to indicate that a permittee may test "or evaluate" mining-related discharges for non-storm water discharges to make today's MSGP consistent with the 1995 MSGP.

Also in response to comments, the permit language in the final MSGP which defines the reclamation phase was modified to reflect post-mining land uses other than "pre-mining state" which had been in the proposed MSGP. In addition, the final MSGP has been clarified to indicate that sampling waivers in Part 5.3.1 of the MSGP do apply to Sector G.

C. Sector I—Oil and Gas Extraction and Refining

In response to a comment, the title for Sector I was changed to include "Refining" to clarify that runoff from refineries (except runoff subject to effluent limitations guidelines) is eligible for coverage under today's MSGP.

D. Sector J—Mineral Mining and Processing

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector J to determine whether these provisions need to be updated for the reissued MSGP. To clarify the applicability of the MSGP regarding construction activity at mineral mining sites and to make mineral mining requirements consistent with metal mining provisions (Sector G), Sector J has been modified to indicate that earth-disturbing activities occurring in the "exploration and construction phase" of a mining operation must be covered under EPA's Construction General Permit (63 FR 7858, February 17, 1998) if the area

disturbed is one acre or more. All mining exploration/construction operations of less than one acre must be covered under the MSGP-2000.

E. Sector K—Hazardous Waste Treatment, Storage or Disposal Facilities

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector K to determine whether these provisions need to be updated for the reissued MSGP. On January 19, 2000 (65 FR 3008), EPA promulgated final effluent limitations guidelines (ELGs) for "contaminated storm water discharges" from new and existing hazardous landfill facilities regulated under RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N), except for the following "captive" landfills:

(a) Landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

For Sector K of the new MSGP, EPA has included the new ELGs (40 CFR Part 445 Subpart A) for hazardous landfill facilities.

The term "contaminated storm water" is defined in the ELGs as "storm water

which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater." [40 CFR 445.2]. Contaminated storm water may originate from areas at a landfill including (but not limited to): "the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas." [40 CFR 445.2].

The term "non-contaminated storm water" is defined in the ELGs as "storm water which does not come in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater." [40 CFR 445.2]. Non-contaminated storm water includes storm water which "flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill." [40 CFR 445.2].

The term "landfill wastewater" is defined in the ELGs as "all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment, and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility."

The 1995 MSGP authorized discharges of storm water associated with industrial activity which includes contaminated storm water discharges (as defined above) as well as other non-contaminated storm water discharges (also defined above). Today's final MSGP continues to authorize storm water associated with industrial activity; however, for contaminated storm water discharges as defined above, the reissued MSGP requires compliance with the promulgated ELGs for such discharges (with monitoring once/year during each year of the term of the final MSGP). The ELGs for the new and existing hazardous landfills are found in Table K-1 below:

TABLE K-1—EFFLUENT LIMITATIONS GUIDELINES FOR CONTAMINATED STORM WATER DISCHARGES (MG/L)

Pollutant	Maximum for 1 day	Monthly average maximum
BOD5	220	56

TABLE K-1—EFFLUENT LIMITATIONS GUIDELINES FOR CONTAMINATED STORM WATER DISCHARGES (MG/L)—Continued

Pollutant	Maximum for 1 day	Monthly average maximum
TSS	88	27
Ammonia	10	4.9
Alpha Terpineol	0.042	0.019
Aniline	0.024	0.015
Benzoic Acid	0.119	0.073
Naphthalene	0.059	0.022
p-Cresol	0.024	0.015
Phenol	0.048	0.029
Pyridine	0.072	0.025
Arsenic (Total)	1.1	0.54
Chromium (Total)	1.1	0.46
Zinc (Total)	0.535	0.296
pH	Within the range of 6–9 pH units.	

Today's final MSGP (like the 1995 MSGP) does not authorize non-storm water discharges such as leachate and vehicle and equipment washwater. These and other landfill-generated wastewaters are subject to the ELGs. Today's final MSGP does, however, continue to authorize certain minor non-storm water discharges (listed in Part 1.2.2.2) which are very similar to the 1995 MSGP.

F. Sector L—Landfills, Land Application Sites and Open Dumps

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector L to determine whether these provisions need to be updated for the reissued MSGP. The SWPPP requirements of the 1995 MSGP already include several special BMPs for this industry in addition to the MSGP's basic BMP requirements.

On January 19, 2000 (65 FR 3008), EPA promulgated final effluent limitations guidelines (ELGs) for "contaminated storm water discharges" from new and existing non-hazardous landfill facilities regulated under RCRA Subtitle D (40 CFR Part 445 Subpart B). For Sector L of today's MSGP, EPA has included the ELGs as they apply to facilities covered by this sector. For Sector L facilities, the ELGs apply to:

Municipal solid waste landfills regulated under RCRA Subtitle D at 40 CFR Part 258 and those landfills which are subject to the provisions of 40 CFR Part 257, except for any of the following "captive" landfills:

(a) Landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

EPA has not modified Sector L for the discharges which are not subject to the ELGs. In addition, EPA would like to call attention to a new EPA publication entitled "Guide for Industrial Waste Management" (EPA 530-R-99-001, June, 1999) which provides a useful information resource for permittees in complying with the MSGP, and in minimizing the impact of landfills to the environment overall.

The term "contaminated storm water" is defined in the ELGs as "storm water which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater." [40 CFR 445.2]. Contaminated storm water may originate from areas at a landfill including (but not limited to): "the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas." [40 CFR 445.2].

The term "non-contaminated storm water" is defined in the ELGs as "storm water which does not come in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater." [40 CFR 445.2]. Non-contaminated storm water includes storm water which "flows off the cap,

cover, intermediate cover, daily cover, and/or final cover of the landfill." [40 CFR 445.2].

The term "landfill wastewater" is defined in the ELGs as "all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment, and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility." [40 CFR 445.2].

The 1995 MSGP authorized discharges of storm water associated with industrial activity from landfills including contaminated storm water discharges as defined in the ELGs as well as non-contaminated storm water. Today's final MSGP continues to authorize storm water associated with industrial activity; however, for contaminated storm water discharges as defined above, today's MSGP requires compliance with the promulgated ELGs for such discharges (with monitoring once/year during each year of the term of the final MSGP). The ELGs are found in Table L-1 below:

TABLE L-1—EFFLUENT LIMITATIONS GUIDELINES FOR CONTAMINATED STORM WATER DISCHARGES (MG/L)

Pollutant	Maximum for 1 Day	Monthly average maximum
BOD5	140	37
TSS	88	27
Ammonia	10	4.9
Alpha Terpineol	0.033	0.016
Benzoic Acid	0.12	0.071
p-Cresol	0.025	0.014
Phenol	0.026	0.015
Zinc (Total)	0.20	0.11
pH	within the range of 6–9 pH units.	

Today's final MSGP (like the 1995 MSGP) does not authorize non-storm water discharges such as leachate and vehicle and equipment washwater. These and other landfill-generated wastewaters are subject to the ELGs. Today's MSGP does, however, continue to authorize the same minor non-storm water discharges (listed in Part 1.2.2.2) as the 1995 MSGP.

G. Sector S—Air Transportation Facilities

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector S to determine whether these provisions need to be updated for the reissued MSGP. The SWPPP requirements of the 1995 MSGP included several special BMP requirements for airports in addition to the MSGP's basic BMP requirements. Additional technologies have been developed since the original MSGP issuance for deicing operations which have been included in today's MSGP. A lengthy (but not comprehensive) list of new deicing chemical and BMP options is provided in Parts 6.S.5.3.6.2 and 6.S.5.3.7. More information on these options is found in the EPA publication "Preliminary Data Summary, Airport Deicing Operations" (<http://www.epa.gov/ost/guide/airport/index.html>).

The MSGP-2000 has been clarified such that compliance evaluations (Part 6.S.5.5) shall be conducted during a period when deicing activities are likely to occur (vs. a month when deicing activities would be atypical or during an extended heat wave), not necessarily during an actual storm or when intense deicing activities are occurring. This requirement is not seen as onerous, as EPA believes that most weather conditions can be reasonably anticipated and the evaluation can be planned for.

In addition, EPA has revised Part 6.S.5.4 to reflect that monthly inspections of deicing areas during the deicing season (e.g., October through April) are now allowed at airports with highly effective, rigorously implemented SWPPPs. This requirement is a reduction from the previous MSGP's weekly requirement. However, if unusually large amounts of deicing fluids are being applied, spilled or discharged, weekly inspections should be conducted and the Director may specifically require such weekly inspections. In addition, personnel who participate in deicing activities or work in these areas should, as the need arises, inform the monthly inspectors of any conditions or incidents constituting an environmental threat, especially those needing immediate attention.

H. Sector T—Treatment Works

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector T to determine whether these provisions need to be updated for the reissued MSGP. The SWPPP requirements of the 1995 MSGP already include a few special BMP

requirements for this industry in addition to the MSGP's basic BMP requirements. In reviewing the information which EPA has available on this industry, EPA has identified several additional areas at treatment works facilities which we believe should be considered more closely for potential storm water controls. As a result, EPA has included additional or modified permit requirements which we believe are appropriate to include in Sector T.

Today's MSGP requires that operators of Sector T treatment works include the following additional areas or activities, where they are exposed to precipitation, in their SWPPP site map, summary of potential pollutant sources, and inspections: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving stations. An additional BMP that permittees must consider is routing storm water into the treatment works, or covering exposed materials from these additional areas or activities.

I. Sector Y—Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries

EPA has re-evaluated the provisions of the 1995 MSGP for industrial facilities in Sector Y. The 1995 MSGP included several special BMP requirements for rubber manufacturers to control zinc in storm water discharges. However, no special BMPs beyond the MSGP's basic SWPPP requirements were included in the 1995 MSGP for manufacturers of miscellaneous plastic products or miscellaneous manufacturing industries.

EPA has several ongoing programs directed toward identifying additional pollution prevention opportunities for different industrial sectors. For example, EPA's Office of Compliance has published "sector notebooks" for a number of industries, including the rubber and miscellaneous plastics industry (EPA 310-R-95-016). The sector notebooks are intended to facilitate a multi-media analysis of environmental issues associated with different industries and include a review of pollution prevention opportunities for the industries. As discussed below, EPA's sector notebook for the rubber and plastic products industry identifies a number of additional BMPs (beyond those in the 1995 MSGP) which could further reduce pollutants in storm water discharges from these facilities, and which have been included in the reissued MSGP.

1. Rubber Manufacturing Facilities

Today's MSGP requires that rubber manufacturing facility permittees consider the following additional BMPs (which were selected from those in the sector notebook) for the rubber product compounding and mixing area:

(1) consider the use of chemicals which are purchased in pre-weighed, sealed polyethylene bags. The sector notebook points out that some facilities place such bags directly into the banbury mixer, thereby eliminating a formerly dusty operation which could result in pollutants in storm water discharges.

(2) consider the use of containers which can be sealed for materials which are in use; also consider ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened.

(3) consider the use of automatic dispensing and weighing equipment. The sector notebook observes that such equipment minimizes the chances for chemical losses due to spills.

2. Plastic Products Manufacturing Facilities

For plastic products manufacturing facilities, today's final MSGP requires that permittees consider and include (as appropriate) specific measures in the SWPPP to minimize loss of plastic resin pellets to the environment. These measures include (at a minimum) spill minimization, prompt and thorough cleanup of spills, employee education, thorough sweeping, pellet capture and disposal precautions. Additional specific guidance on minimizing loss can be found in the EPA publication entitled "Plastic Pellets in the Aquatic Environment: Sources and Recommendations" (EPA 842-B-92-010, December, 1992) and at the website of the Society of the Plastics Industry (www.socplas.org).

3. Industry-Sponsored Efforts

Both the rubber manufacturing and plastic products industries are also active in sponsoring studies designed to reduce the environmental impacts associated with the production, use and ultimate disposal of their products. However, in reviewing recent work in this regard, EPA has not identified any additional BMPs for storm water discharges which would be appropriate for the reissued MSGP. Therefore, only the additional BMPs noted above are included in the reissued MSGP for these industries.

IX. Summary of Responses to Comments on the Proposed MSGP

EPA received comments from 45 individuals in response to the proposed permit. A summary of the Agency's responses to those comments appears below. Responses to each comment is available from the Water Docket, whose address and hours of operation are listed in the introduction to this notice.

Section 1.2 Eligibility

Comment a: One commenter requested clarification on the responsibilities military bases, which resemble small municipalities, have with regard to non-industrial areas of the base. The commenter expressed concern that examples of co-located industrial activities in Section VI.B.3 of the fact sheet and Part 1.2.1.1 of the proposed permit could be interpreted to require coverage for all vehicle maintenance activities at a base, even those unrelated to an industrial activity. The commenter further noted that bases in urbanized areas would require base-wide storm water management programs anyway as Small Municipal Separate Storm Sewer Systems under Phase II of the Storm Water Program.

Response a: EPA agrees that municipalities and military or other governmental installations are only responsible for obtaining permits for storm water associated with industrial activity for those portions of their municipality or installations where they have a storm water discharge that is covered under the definition of "storm water associated with industrial activity." Under this interpretation, even though a military base may choose to submit a single NOI for all industrial activities on the base, the SWPPP would only need to identify facilities/areas associated or not associated with industrial activities and that have a SWPPP covering the industrial activity areas. The SWPPP required under the MSGP would not need to address storm water controls for the non-industrial areas of the base. A note has been added to Part 4.1 (Storm Water Pollution Prevention Plans) of the permit to clarify the scope of the SWPPP.

Comment b: The proposed limitations on transfer of storm water discharges from a previous permit to the MSGP could result in undue restrictions. The commenter felt that there could be reasons, e.g., for consistent management of storm water across a site, etc. that either the permittee or the permitting authority would want to address all storm water at a facility under a general permit.

Response b: EPA has reconsidered the Part 1.2.3.3.2 restrictions and Part 1.2.3.3.2.1 of the proposed permit has been eliminated. Part 1.2.3.3.2.1 would only have allowed permittees to seek MSGP coverage for storm water discharges previously covered by another permit if that previous permit contained only storm water and eligible non-storm water (i.e., an individual permit for wastewater, etc. would no longer be required if coverage under the MSGP was allowed). EPA's review did identify some unintended consequences and unresolved issues that could result from this restriction.

A facility (including new facilities) that never had storm water discharges covered by an individual permit, or which was located where access to a municipal wastewater treatment plant for wastewater discharges was available, would have an opportunity for burden reduction that would not be available to a facility with even cleaner storm water that happened to have storm water discharges covered in a previous permit and could not eliminate their wastewater discharges. There could be cases where a smaller and "cleaner" facility would not be able to take advantage of the savings (e.g., individual permit application sampling is not required) the MSGP offered their competitors simply because they had a minor wastewater discharge that could not be eliminated.

While the main purpose of the proposed Part 1.2.3.3.2.1 restriction was to discourage dual permits at a facility, there are already many facilities that have permit coverage split between an individual permit and the MSGP and dual permit coverage would still be available in many cases anyway. Currently, some of these "dual permit" facilities have only wastewater under an individual permit and all their storm water discharges under the MSGP, while at others, the individual wastewater permit includes some of the storm water discharges, with the remaining storm water discharges covered by the MSGP. This ability to have split coverage in at least some situations is necessary to address situations where at least interim coverage under a general permit for a new storm water discharge is necessary or desirable from either the permittee's or the permitting authority's standpoint.

EPA has determined that the proposed restrictions in Part 1.2.3.3.2 relating to discharges for which a water quality-based limit had been developed and discharges at a facility for which a permit had been (or was in the process of being) either denied or revoked by the permitting authority were necessary to

address the anti-backsliding requirements of the Clean Water Act or to ensure that discharges from a facility requiring the additional scrutiny of an individual permit application were not inadvertently allowed under the general permit. In any event, only those storm water discharges under the previous permit that met all other eligibility conditions of the MSGP could even be considered for transfer.

EPA periodically promulgates new effluent limitation guidelines, some of which, such as the those for landfills published February 2, 2000, contain storm water effluent limitation guidelines. Under Part 1.2.2.1.3 of the MSGP, a storm water discharge subject to a promulgated effluent limitation guideline is only eligible for coverage if that guideline is listed in Table 1-2. A new guideline promulgated during the term of the permit would thus alter the eligibility for the permit not only for new dischargers, but also for discharges already covered by the permit. In order to avoid the situation where a discharge would suddenly become ineligible upon promulgation of a new guideline, Part 1.2.2.1.3 has been modified to allow interim coverage under the permit where a storm water effluent guideline has been promulgated after the effective date of the permit, but the permit has not yet been modified to include the new guideline. This will allow continued coverage until the new storm water guideline could be added to the permit. Where the new guideline includes new source performance standards, "new sources" would need to comply with Part 1.2.4 prior to seeking permit coverage.

Section 1.4 Terminating Coverage

Comment: (Comment also addresses Section 11.1 Transfer of Permit Coverage) Several commenters viewed the submittal of an NOT by the old operator and the submittal of an NOI by the new operator in order to transfer permit coverage after a change in ownership as a new and overly burdensome requirement (Parts 1.4 and 11.1). An alternative suggested was a simple notice to the permit file of the ownership change.

Response: EPA has determined that the most effective method for accommodating and tracking a change in the owner/operator at a facility covered by the general permit is to have the old operator submit a Notice of Termination certifying that they are no longer the operator of the facility, and for the new operator to submit a Notice of Intent certifying their desire and eligibility to be covered by the general permit. In fact, this is not a new

requirement since the same process was required under the 1995 MSGP (see Part II.A.4 and Part XI.A at 60 FR 51113 and 51122, respectively). The only "new" aspect of the process is the 30 day timeframe for submittal of the NOT by the old operator and a clarification that simple name changes in a particular company (e.g., Jones Industrial Manufacturing, Co. changing to JIMCO) can be made with a simple update to the company's NOI and a NOT would not be required. Submittal of the NOT by the old operator documents that the old operator believes he no longer needs coverage under the MSGP for any storm water discharges. In addition, EPA is more able to maintain a cleaner database of facilities actually covered by the permit both currently and in the past. The NOI/NOT process for transfers under the general permit is thus essentially a streamlined parallel process to what would otherwise be required under 40 CFR 122.61.

The permit transfer procedures at 40 CFR 122.61 are designed to avoid the time delays and resource burdens associated with issuance of a new permit for a facility just because there is a new owner/operator. Under this process, transfer of the permit to the new owner/operator cannot be made without an actual permit modification (a lengthy process especially for general permits), unless the old operator submits a thirty day advance notice and a written agreement between the parties containing a specific date for transfer of permit responsibility, coverage, and liability between them.

The nature of a general permit is such that there is no actual permit issued to any individual facility, but rather that multiple dischargers are in effect "registering" their intent to use the discharge authority offered by the general permit to anyone who is eligible. This "registration" is accomplished by an operator's submittal of the Notice of Intent to be covered by the general permit as little as two days before they need permit coverage. In fact, regulations at 40 CFR 122.28(b)(2) specifically require submittal of an NOI in order for an operator to be authorized under a general permit for discharges of storm water associated with industrial activity. EPA thus views the requirements for the new operator to file an NOI as little as two days prior to the transfer and for the old operator to file an NOT within thirty days after the transfer to be less burdensome than the thirty day advance notice and written agreements that would otherwise be required under the permit transfer requirements of 40 CFR 122.61.

Section 1.5 Conditional Exclusion for No Exposure

Comment: EPA should insert the No Exposure Certification form and guidance within the permit since many facility operators are unaware of its existence.

Response: EPA has generated a document, "Guidance Manual for Conditional Exclusion from Storm Water Permitting Based on "No Exposure" of Industrial Activities to Storm Water," and a separate no exposure announcement to help operators understand and apply for the conditional permitting exclusion. The guidance is available in hard copy from EPA's Water Resource Center. In addition, EPA also sent a mass mailing alerting all EPA permittees as well as stakeholder groups to the MSGP-2000 and the no exposure exclusion. To provide the No Exposure Certification in as many possible places, EPA is publishing the form and instructions as an addendum to the MSGP-2000.

Section 2.1 Notice of Intent (NOI) Deadlines

Comment: Commenters requested an extension of the 90 day timeframe for submission of their NOI to 270 days. Commenters said they needed the additional time to complete their Storm Water Pollution Prevention Plan (SWPPP), application for an alternate permit, or their endangered species consultation or adverse impact investigation. A commenter also requested clarification of coverage during the 90 days between this publication and their submission of their NOI.

Response: The fact sheet clarifies that SWPPPs are to be prepared at the time the NOI is submitted. Since most permittees are already covered under the current MSGP and have a requirement to update their SWPPP as the need arises, there is no basis for an automatic extension to 270 days. However, facilities may seek an extension up to 270 days to develop their SWPPP, or to obtain an alternate permit, on a case-by-case basis. Similarly, facilities can request an extension up to 270 days if they need to conduct an endangered species consultation or adverse impact investigation. Permittees covered under the current MSGP will continue to be covered during the next 90 days as long as they meet the conditions set forth in the 1995 MSGP.

Section 2.2 Contents of Notice of Intent (NOI)

Comment a: Clarify how to complete the NOI form in situations where an

MS4 has industrial activities and is conveying the pollutants to its own storm drainage system.

Response a: The intent of Section 2.2.2.5 was to identify the municipal separate storm sewer system under the assumption that it would be under different ownership. If there is not a separate owner, this requirement is unnecessary. This section has been revised to clarify "the name of the municipal operator if the discharge is through a municipal separate storm sewer system under separate ownership."

Comment b: A commenter questioned whether EPA was requiring or encouraging permittees to consult FWS and NMFS in making its endangered species finding.

Response b: The facility is responsible for obtaining the threatened or endangered species list to make sure that listed specie or critical habitat is not located in or around the vicinity of your facility. That list may be obtained by phoning or mailing the FWS or NMFS, visiting EPA's website, or by some other means. Thus, the permittee is not required to contact the two agencies if he can meet his obligation in another manner.

Comment c: Do not include latitude/longitude information on the NOI.

Response c: EPA requires all regulated facilities to submit latitude and longitude information. The information is critical in overseeing compliance with endangered species assessments and coordinating compliance assistance and enforcement activities across media programs.

Section 2.3 Use of NOI Form

Comment a: Do not add check boxes related to NHPA and ESA compliance.

Response a: EPA believes the additional information improves the Agency's ability to oversee implementation of the permit and compliance with ESA and NHPA requirements. Because the permittee is already responsible for conducting the analysis, there is minimal additional burden associated with indicating on the NOI form how the analysis was conducted. Therefore, EPA intends to retain this requirement. The NOI form requires review by the Office of Management and Budget. Until the new form is approved, permittees should use the current form. EPA's ability to issue today's permit is contingent upon its compliance with ESA and NHPA; thus, provisions related to those statutes is part and parcel of today's permitting action.

Comment b: Commenters supported EPA's proposal to allow facilities to

submit NOIs, notices of termination, and discharge monitoring reports electronically. However, they cautioned that EPA continue to allow hard copy filing since not all permittees have internet access.

Response b: The final permit retains the requirement of paper filing for NOIs, NOTs, and DMRs. While EPA believes that electronic filing will be incorporated as an option in the future, it is currently not available.

Section 3.3 Compliance with Water Quality Standards

NPDES regulations at 40 CFR 122.44(d)(1)(i) require that the MSGP ensure compliance with State water quality standards for all discharges which "will cause, have the reasonable potential to cause, or contribute" to an exceedance of a State standard. With the wide variety of facilities to be permitted under the MSGP, EPA believes that reasonable potential to cause or contribute to exceedances of water quality standards is likely to exist at least for some facilities. Therefore the MSGP must include appropriate provisions to ensure compliance with State standards. For general permits, EPA's guidance document entitled "General Permit Program Guidance" (February, 1988) suggests an overall narrative statement requiring compliance with State standards to address the fact that the permit will cover a wide variety of facilities subject to different standards depending on their location. Part 3.3 of the proposed MSGP included a narrative statement in accordance with this guidance to ensure compliance with 40 CFR 122.44(d)(1)(i). Part 1.2.3.5 of the proposed MSGP also included an exclusion from permit coverage for facilities which EPA has determined may cause or contribute to violations of State standards. Commenters raised a number of concerns regarding the provisions of the proposed MSGP related to compliance with State standards. However, after review of the comments, EPA believes that the provisions of the proposed MSGP were appropriate and these provisions have been retained in the final MSGP. Following below are EPA responses to the specific issues raised by the commenters:

Lack of Coverage for Facilities With Reasonable Potential

Comment a: A commenter was puzzled by the exclusion from coverage in Part 1.2.3.5 of the proposed MSGP and requested additional explanation.

Response a: EPA believes that facilities which are shown to cause, or have the reasonable potential to cause or contribute to exceedances of State

standards may be more appropriately permitted under individual permits or a separate general permit with alternate permit requirements designed to ensure compliance with State standards. This is the basis for the exclusion. Part 1.2.3.5 also provides, however, that MSGP coverage may be available if the control measures in the storm water pollution prevention plan (SWPPP) are sufficient to ensure compliance with State standards.

Comment b: Part 1.2.3.5 of the proposed MSGP could prove burdensome and could lead to permit backlogs depending on the extent of its use.

Response b: Given the large number of facilities covered by the MSGP, it is not practical for EPA to individually review the status of all facilities covered by the MSGP prior to submittal of the NOI. EPA has developed eligibility criteria for coverage under the MSGP-2000 which should, if applied appropriately by the facility operator, screen out facilities which have "reasonable potential" to exceed a state standard. In addition, where EPA determines there is a "reasonable potential," the Director will require the facility to submit an individual permit or take other appropriate action.

Comment c: MSGP coverage should not be allowed until the absence of reasonable potential had been demonstrated by the discharger.

Response c: As noted above, EPA does not believe this is practical for all facilities given the large number of dischargers covered by the permit. Moreover, as discussed in EPA's "Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits" (61 FR 43761, November 26, 1996), there will likely be circumstances where inadequate information is available to perform the reasonable potential analysis.

Are Discharges with Reasonable Potential a Permit Violation?

Comment d: Several commenters objected to Part 3.3 of the proposed MSGP which indicated that discharges which have occurred would be violations of the MSGP if they are later shown to have the reasonable potential to cause or contribute to exceedances of State standards.

Response d: EPA believes that such discharges are appropriately characterized by the MSGP as violations. The narrative statement in the MSGP requiring compliance with water quality standards in effect incorporates into the permit all numeric effluent limitations which are necessary to ensure compliance with State

standards. When a discharge is shown to have reasonable potential, this implies that discharges are occurring which would exceed the permit limits needed to ensure compliance with State standards. Since the narrative statement incorporates all limits needed to ensure compliance with State standards, the discharges are appropriately characterized as violations of the permit.

Process for Terminating Coverage Under the MSGP

Comment e: Several commenters expressed concern regarding the process for terminating coverage under the MSGP and ensuring due process for dischargers to contest such actions by EPA.

Response e: EPA believes that the MSGP does ensure due process for dischargers. Part 9.12 of the MSGP provides that EPA may require an individual permit application from a discharger, or require the discharger to seek coverage under an alternate general permit. If an individual permit application were required, a draft permit would be prepared and a full opportunity would be provided to the discharger in accordance with 40 CFR Part 124 to comment on the draft permit and contest any final determination. Further, any alternate general permit would provide (in accordance with 40 CFR 122.28(b)(3)(iii)) that the discharger could seek coverage under an individual permit rather than the alternate general permit. Such a request would also be processed in accordance with the procedures at 40 CFR Part 124.

Comment f: A number of commenters also asked whether a notice of violation of Part 3.3 of the MSGP for violations of State water quality standards would be in writing.

Response f: Dischargers would be notified in writing by EPA of any violation of Part 3.3.

Permit as a Shield Concerns

Comment g: Section 402(k) of the Clean Water Act shields permittees from the requirements of Part 3.3 of the MSGP to comply with water quality standards.

Response g: EPA disagrees with the commenters on this matter. Section 402(k) provides that compliance with an NPDES permit is considered to be compliance, for purposes of section 309 and 505 enforcement, with sections 301, 302, 306, 307 and 403 of the Clean Water Act. However, the violations which are envisioned by Part 3.3 of the MSGP would be violations of an NPDES permit itself, *i.e.*, the water quality-based effluent limitations which are

incorporated into the MSGP by virtue of the narrative statement. Section 402(k) does not provide a shield for such violations.

Concerns about Applying State Water Quality Standards to Storm Water

Comment h: Water quality standards cannot apply to storm water discharges since special wet weather standards have not been developed to address episodic events.

Response h: EPA disagrees that State water quality standards cannot apply in the absence of special wet weather standards. Section 402(p)(3)(A) of the Clean Water Act specifically requires that industrial storm water dischargers comply with State water quality standards. EPA has recognized, however, the difficulties in developing appropriate water quality-based effluent limitations for storm water discharges. In response to concerns such as those raised by the commenter, EPA has developed an "Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits" (61 FR 43761, November 26, 1996). Where numeric water quality-based effluent limitations are infeasible (due for example to inadequate information on which to base the limitations), best management practices (BMPs) such as those in the SWPPP would serve as the water quality-based effluent limitations.

Comment i: Clarify whether mixing zones would apply to the storm water discharges.

Response i: Mixing zones would apply to the extent that State water quality standards provide for their use.

Required Actions if Violations of Standards Occur

Comment j: A commenter was unclear concerning the modifications of the SWPPP that would be required by Part 3.3 of the MSGP if violations of State water quality standards occur.

Response j: The SWPPP must be modified to include additional BMPs to the extent necessary to prevent future violations.

Comment k: Clarify who would determine the additional control measures that would be required by Part 3.3 of the MSGP.

Response k: The discharger would at least initially be responsible for determining the additional control measures. However, Part 4.10 of the MSGP also provides that EPA may require modifications of the SWPPP if it proves to be inadequate.

Can a Reasonable Potential Analysis Occur at Any Time During the Permit Term?

Comment l: Part 3.3 of the MSGP should not require a reasonable potential analysis at any time during the term of the permit.

Response l: The information to support a reasonable potential determination would be based on additional information that becomes available concerning a particular discharge (from monitoring results, for example). As such, the permit appropriately provides that a reasonable potential analysis (possibly leading to an individual permit or separate general permit) may be required at such a time.

Comment m: Discharges of a pollutant which increase during the term of the permit should not be considered a permit violation.

Response m: EPA disagrees with the commenter on this issue. The narrative statement in Part 3.3 of the MSGP requires that dischargers comply with all State water quality standards throughout the term of the permit. Dischargers must ensure that, if there are increases in the discharges of a particular pollutant, the increases are not sufficient to cause or contribute to exceedances of water quality standards.

Questions Regarding the Benchmark Concentrations

Comment n: Part 3.3 of the proposed MSGP would undermine EPA's use of the benchmark values in the MSGP.

Response n: EPA disagrees with the commenters in this regard. The benchmark values are concentrations which are used to evaluate whether a generally effective SWPPP is being implemented. The SWPPP is required to ensure compliance with the technology-based discharge requirements of the Clean Water Act. Exceedance of a benchmark value is not a permit violation. However, if a permittee complies with the benchmarks, the permittee is eligible for the monitoring waiver in year 4 of the term of the permit and this provides an incentive to implement an effective SWPPP. Part 3.3 of the MSGP is required to ensure compliance with the water quality-based requirements of the Clean Water Act, which are in addition to the technology-based requirements. Part 3.3 of the MSGP does not undermine the benchmarks. Part 3.3 is simply a separate requirement of the Clean Water Act which must be included in the permit in addition to the technology-based requirements.

General Comment on Water Quality Standards Requirements

Comment o: One commenter lodged a general objection to Part 3.3 of the proposed MSGP, but did not elaborate on specific concerns.

Response o: As discussed above, EPA believes that Part 3.3 is appropriate and necessary to ensure compliance with State water quality standards. As such, Part 3.3 was retained in the final MSGP.

Section 4.1 Storm Water Pollution Prevention Plan (SWPPP) Requirements

Comment a: EPA should not measure progress solely on the number of BMPs applied.

Response a: As stated, EPA's intention in requiring the comprehensive site compliance evaluation is to determine the effectiveness of BMPs in use at the site, and to assess compliance with the terms and conditions of the permit. Additional new BMPs are not prescribed as part of this requirement; the options to include BMPs to replace those which are not working appropriately, or to augment existing BMPs to ensure better performance, rests solely with the facility operator, based on the findings of the compliance evaluation.

Comment b: Clarify the frequency of training required.

Response b: Some industrial sectors covered by this permit are required to provide training at least once per year. In other sectors, it is left to the discretion of the operator. EPA's fact sheet recommends that facilities conduct employee training annually at a minimum, and acknowledges that, for some facilities, a more frequent training schedule may be appropriate to ensure that personnel at all levels of responsibility are informed of the components and goals of the site's SWPPP.

Comment c: Clarify the term "locally available."

Response c: EPA intends the term "locally available" to mean a facility office which need not actually be located on-site, but co-located with other facility operations. It is not necessary for a permittee to maintain a local presence near an unstaffed site for the purposes of maintaining availability of the SWPPP.

Comment d: Fourteen days is an unrealistic timeframe for modifying a SWPPP in response to a discharge of a reportable quantity of oil.

Response d: EPA does not consider the requirement to revise the SWPPP within 14 days after a discharge of a reportable quantity of oil to be unrealistic. Changes to accommodate a

description of the release, date and circumstances of the release, as well as a description of the actions taken to address the problem and any necessary changes to the BMPs to prevent future releases are inherently necessary to prevent water quality degradation.

Comment e: It is standard practice to keep a copy of their SWPPPs with their permit and, therefore, there is no objection to this requirement.

Response e: EPA acknowledges that many industrial facilities already keep a copy of the storm water permit with their SWPPP, and the Agency is formalizing that practice as a requirement of the permit for all facilities.

Section 4.2 Contents of Plan

Comment a: A commenter believed EPA was requiring velocity dissipation devices to minimize erosion due to flow velocity.

Response a: EPA's intention is to require facilities to evaluate the need for velocity dissipation devices where it is necessary to minimize erosion due to flow velocity. Facilities should use their best judgment when considering if velocity dissipation devices are needed. The language in the permit has been clarified.

Comment b: Specify a set of minimum management practices for coverage under the permit.

Response b: Due to the variety of industries covered by the Multi-Sector General Permit, there is no "minimum" list of best management practices that would suitably address the multiple situations found at different industrial sites. EPA considers it sufficient to outline minimum criteria that each facility operator must consider to minimize discharges from their property, and allow facility operators to identify and implement BMPs that are appropriate for their site.

Comment c: Do not require the SWPPP to identify oil spills or leaks below reportable quantities. Only those sites that have not been cleaned up to appropriate levels should be included in the site description and shown on the site map.

Comment d: EPA has not changed the basic intent of this permit requirement: a facility must keep a record of significant spills or leaks of both hazardous substances or oil and, for releases in excess of reportable quantities under 40 CFR Parts 117 or 302, revise its pollution prevention plan as necessary to prevent the reoccurrence of such releases. A spill or leak may not meet the threshold of a "reportable quantity" but may still be sufficiently significant to cause water quality

impairment, and therefore should be acknowledged and mitigated by the permittee. EPA does not intend that "reportable quantity" defines the minimum amount of a substance which should be appropriately managed. In regards to including previous spill and/or leak areas in the site map and associated descriptions, the Agency views the inclusion of all areas where spills have occurred over the last three years from the date of NOI submittal as important information which may be useful in assessing future risks.

Comment d: The provision prohibiting discharge of "solid materials" is too broad and should be eliminated.

Response d: EPA intends the reference to "solid materials, including floating debris" and "Off-site tracking of raw, final, or waste materials or sediment, and the generation of dust" as having the generally accepted plain language meanings, and that facility operators should use their best professional judgment in applying this requirement to their discharge. The reference is not necessarily meant to apply in particular to suspended soil. EPA has purposefully allowed for reasonable flexibility in allowing each facility to determine whether "solid materials," "floating debris" and/or "dust" are a component of their storm water discharge. The Agency acknowledges that many areas have state or local ordinances prohibiting the off-site tracking and generation of dust; therefore, this requirement does not pose a hardship on facility operators. While not prohibiting the discharge of waters containing soils, the permit still requires that discharges must comply with state/local water quality standards.

Comment e: The requirement for "routine inspections" and "records of inspections" are too broad.

Response e: EPA acknowledges that most industrial facilities conduct regular inspections of plant conditions. As discussed in Part 4.2.7.1.5 of the permit, facility operators must explicitly outline in the SWPPP the frequency of regular inspections at their facility which will incorporate inspections of industrial activities or materials that are exposed to storm water. Records of these specific storm water inspections, along with records of any followup actions taken as a result of these inspections, must be kept with the SWPPP. This facility-specific schedule of periodic inspections is what EPA is referring to as "routine facility inspections."

Comment f: An evaluation of groundwater impacts or concerns is

beyond the scope of a stormwater pollution prevention plan.

Response f: In some cases, groundwater beneath a facility may be hydrologically connected to surface waters. EPA's intent for including an evaluation of impacts to groundwater when considering appropriate BMPs is to ensure that facility operators are fully cognizant of the hydrology of their area, and have evaluated any appropriate BMPs in the event that such a situation exists for their property. If there are no possible impacts to groundwater, this fact should be acknowledged in the SWPPP.

Section 4.4 Non-Storm Water Discharges

Comment a: Include swimming pool discharges as an allowable storm water discharge.

Response a: EPA does not include swimming pool discharge as an allowable non-storm water discharge in the Multi-Sector General Permit, as this is a general permit to cover storm water discharges from industrial activity. The Agency is unclear as to how many industrial facilities have swimming pools that would necessitate this specific exemption. The inclusion of nonchlorinated swimming pool discharges as an allowable non-storm water discharge will be better suited to the upcoming EPA Small Multiple Separate Storm Sewer General Permit, which will be available by December 2002.

Comment b: The permit should allow for case-by-case determinations for inclusion of de minimus non stormwater sources.

Response b: By its very nature, a general permit is meant to cover many similar discharges from a variety of similar sources. Case-by-case determinations for de minimus non-stormwater discharges would be extremely time-intensive, and it is not possible to provide for such individual determinations in the context of a general permit. Specific examples of de minimus discharges were not provided by the commenter; therefore, the Agency is not inclined to include such a provision at this time.

Comment c: Delete "drinking fountain water:" from Section 1.2.2.2.3 and cite only "potable water including water line flushings."

Response c: EPA agrees with the issues presented by the commenter, and that the term "drinking fountain water," in itself, is imprecise. Both the draft MSGP fact sheet and permit specifically authorize potable water as an allowable non-storm water discharge. The

"drinking fountain water" language has been deleted.

Section 4.7 Copy of Permit Requirements

Comment: Recommend electronic website access in lieu of paper copy of permit.

Response: The new requirement that a hard copy of the Multi-Sector General Permit be kept with a facility's Storm Water Pollution Prevention Plan is intended to ensure that the permit requirements are easily and readily available to all facility staff who are or may be responsible for implementing the provisions of the permit. Internet access may not be available to staff in all situations; therefore, for ease of reference, EPA is requiring that at least one copy of the permit be retained along with the SWPPP. The sections referring to EPA's acceptance of the electronic medium is contingent, in both cases cited by the commenter, upon the future viability of electronic submittal of NOIs and DMRs to the Agency.

Section 4.9 Timeline

Comment a: The fact sheet and permit need to provide consistent timeframes for SWPPP revisions.

Response a: The fact sheet and permit language were consistent on revising the SWPPP within 14 days of the site evaluation, but were somewhat confusing on how long the permittee had to implement the revisions. To clarify this time period, EPA has revised Part 4.9.3 of the permit to state: "If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm event, or not more than 12 weeks after completion of the comprehensive site evaluation."

Comment b: Thirty days to correct deficiencies in the SWPPP following notification by the Director is insufficient.

Response b: EPA intends for corrections to the Storm Water Pollution Prevention Plan to be accomplished in a timely manner, particularly when deficiencies are identified formally by the Director. The Agency feels that thirty days, as outlined in the existing permit language, is a reasonable amount of time for such changes to be made; if revisions are significant, the permittee may request, and the Director can provide, additional time for revisions to be accomplished.

Comment c: Fourteen days to modify a SWPPP is insufficient.

Response c: The Agency feels that revising the Storm Water Pollution Prevention Plan appropriately to

address deficiencies within 14 days is a reasonable timeframe in which to address changes administratively; additional time is provided to actually put those revisions into place.

Comment d: The SWPPP must be completed and in place prior to issuance of the permit.

Response d: Part 4.1 of the permit states that a SWPPP must be prepared for the facility before submitting a Notice of Intent for permit coverage. EPA's issuance of the MSGP-2000 does not automatically confer coverage to permittees; therefore, EPA feels the requirement that a site-specific SWPPP be in place for the facility operations prior to seeking coverage by way of the submittal of a NOI is sufficient to prevent environmental degradation.

Section 4.12 Additional Requirement: EPCRA Section 313 Reporting

Comment: Many commenters supported removal of EPCRA Section 313 reporting requirements from the permit. Two commenters objected to identifying areas with pollutants that must be reported under EPCRA Section 313 and to develop appropriate storm water controls for these areas.

Response: EPA acknowledges the general support for revisions to this section. The intent of these modifications is to eliminate the redundant requirements of the existing MSGP for permittees subject to reporting requirements under Section 313 of EPCRA, which includes the 20+ categories of Toxic Release Inventory chemicals. The Agency believes that the MSGP-2000 places no additional burden on facility operators with TRI chemicals. Identification of EPCRA 313 chemicals in the SWPPP acknowledges that these chemicals are pollutants of concern. Facilities with any of these pollutants need to develop appropriate storm water controls to contain them. As noted in the fact sheet, EPA believes these concerns have been addressed through existing state and federal requirements which can be referenced in the SWPPP.

Section 4.13 Public Availability for Review

Comment a: The public should be able to obtain access to and comment upon a SWPPP and "no exposure" claim before they are finalized.

Response a: EPA has, in response to this comment, included a provision in the final permit requiring facility operators to make a hard copy of their SWPPP available to the public when requested in writing. EPA believes this requirement is an acceptable compromise between the facility

operator's concerns about having members of the public at their site and the need of the public to understand potential impacts on their environment. EPA does not receive SWPPPs routinely, and, therefore, cannot make them available at its offices or provide them to local government offices. As with the previous MSGP, members of the public have the option of contacting the NOI Center or the Regional EPA Storm Water Coordinators directly to inquire about a facility's permit status.

EPA does not intend to require public comment on SWPPPs, nor require public hearings, because SWPPPs are intended to be modified as necessary to address changes at the facility or when periodic inspections indicate that a portion of the SWPPP is proving to be ineffective. Requirements for public comment and public hearings would delay needed modifications to, not to mention development of, the SWPPP, be burdensome and serve as disincentives to plan updates.

At any time the Agency can conclude that a facility is no longer eligible for coverage under a general permit and require the facility to apply for a general permit. In that event, there would be significant opportunity for public input in the decision-making process.

Comment b: The following should be available in paper copy and on the web: NOI, SWPPP, and "no exposure" certification.

Response b: EPA has found that having a central location for processing NOIs is an efficient and effective way of managing the tremendous amount of data which the Storm Water program generates. Very shortly, members of the public will be able to access information from the NOI database online. The NOI database contains facility information, including the type of industrial activity taking place, facility contact information, and receiving water body information. Also available online will be information on facilities that have submitted "no exposure certifications." Regarding SWPPPs, EPA does not receive them routinely and, therefore, cannot make them available on-line. EPA has, in response to this comment, included a provision in the final permit requiring facility operators to make a hard copy of their SWPPP available to the public when requested in writing. EPA believes this requirement is an acceptable compromise between the facility operator's concerns about having members of the public at their site and the need of the public to understand potential impacts on their environment.

Section 5.1 Types of Monitoring Requirements and Limitations

Comment a: A commenter requested language clarification for the first paragraph under Part 5.1, Quarterly Visual Monitoring.

Response a: Quarterly visual monitoring is required for all permittees covered under the MSGP. The visual inspection must cover all outfalls at the facility from which there are storm water discharges associated with industrial activity.

Comment b: A commenter indicated that Part 5.1.1.4 was clear regarding the visual monitoring waiver for inactive and unstaffed sites. However, it was unclear if a similar waiver for benchmark monitoring applies to inactive and unstaffed sites.

Response b: EPA has clarified in Part 5 that a permittee may exercise a waiver for benchmark monitoring at unstaffed and inactive sites.

Section 5.3 General Monitoring Waivers

Comment a: Commenters supported the adverse sampling condition waiver, as long as the permittee doubles sampling during the next event or eliminates the substitute sampling requirement for areas with extended frozen conditions.

Response a: EPA has decided to keep this temporary waiver, since the main purpose of this specific waiver is to allow the permittees the opportunity to take samples under no adverse nor threatening weather conditions.

Comment b: Allow permittees to waive benchmark monitoring in years 2 and 4 of the MSGP-2000 with the result of the 1995-MSGP; waive difficult logistical conditions or location access similar to those for unstaffed/inactive facilities; and impractical sample collection at large facilities.

Response b: Under Section 402 of the CWA, EPA is required to issue permits which apply and ensure compliance with any applicable requirements of sections 301, 302, 306, 307, and 403. Since these permits are issued with fixed terms not exceeding five (5) years, EPA needs to ensure that permittees continue to comply with applicable requirements. EPA believes that benchmark monitoring is not overly burdensome and provides useful information to the permittee and the Agency. Therefore, EPA will require permittees covered under the reissued MSGP to ensure continued compliance with permit conditions and requirements. In addition, EPA has determined that the general monitoring waivers provided in the previous permit

are adequate, and that additional waivers are not needed. With regard to problems facilities encounter when monitoring their storm water discharges, such as difficult logistical conditions, access to discharge locations or impractical sample collection at large facilities, EPA recommends permittees review the "NPDES Storm Water Sampling Guidance Document" which suggest solutions to these sampling problems.

Section 6.E Sector E—Glass, Clay, Cement, Concrete and Gypsum Products

Comment a: Separate the concrete pipe manufacturing from the cement, ready mixed and concrete block manufacturing sector.

Response a: Based on the characterization of the concrete pipe manufacturing industry and the cement, ready mixed and concrete block manufacturing industry, EPA has determined that the two industries are similar and, thus, has retained the industrial sectors as described in the 1995 permit.

Comment b: Section 6.E.3.1 of the draft permit was not reflective of the September 30, 1998 modification.

Response b: The commenter is correct. The final permit has been changed to reflect the September 30, 1998 modification which removed the limitations of coverage for various industries. Paragraph 6.E.3 has been removed and the remaining paragraphs have been renumbered accordingly.

Section 6.F Sector F—Primary Metals

Comment a: Do not propose any new BMPs for the steel industry in the MSGP-2000.

Response a: Similarly to the 1995 MSGP, the MSGP-2000 prefers the implementation of structural and non-structural BMPs for stormwater management from Primary Metals facilities. It is up to the individual operators to decide which BMPs most effectively meet their needs. This does not preclude the use of additional or new technologies should they be found to be more effective in any given application.

Comment b: The BMPs provided at Parts 6.F.3.2 and 6.F.3.3 omit the most obvious qualifier, which is that inventories of exposed material and housekeeping should be mandated by the MSGP only where the exposed materials have a potential to contact storm water that is discharged from a point source to a water of the United States. In many cases, the types of materials and activities discussed in the above referenced parts occur in areas where precipitation is collected and

contained, and is not discharged. Thus, site inventories and BAT practices discussed in these parts are not relevant except in areas where they affect storm water discharges authorized by the MSGP. Parts 6.F.3.2 and 6.F.3.3 should be clarified (similarly to Part 6.F.3.1) with a statement that these activities are required only in areas where such activities could result in a discharge of pollutants to waters of the United States.

Response b: One of the underlying premises of the MSGP is that if there is a potential for contact between storm water and environmental contaminants, then the facility should apply for coverage under the MSGP. If there is no potential for contact, the facility may be able to submit a "no exposure" certification form, and not be required to obtain permit coverage. Where there is a potential for contact between storm water and industrial activities and/or materials, then the operator needs to obtain permit coverage and take appropriate measures to mitigate the discharge of pollutants.

Comment c: Part 6.F.3.4 includes a requirement for inspections performed under the 2000-MSGP to, among other things, evaluate air pollution control equipment. This activity does not belong under the MSGP. It is a Clean Air Act requirement and an activity performed under each facility's Clean Air Act permit. Such inspections under the MSGP are redundant, inappropriate and extend EPA's CWA authority into the CAA. Inspections of air pollution control equipment should not be a component of any SWPPP or compliance certification under the CWA.

Response c: EPA understands why inspection requirements which routinely fall under the purview of one environmental program (in this case the Air Program) would appear inappropriate under another environmental program (in this case the Water Program). However, if one looks at the potential sources of pollution at primary metals facilities, one will soon discover that one of the principal sources of contamination is from the air pollution control devices. The purpose of the storm water regulations is to keep storm water from coming into contact with any contaminants, regardless of the environmental media from which it arose. If inspections are routinely conducted at a facility pursuant to one environmental statute, that same inspection will generally be accepted by another program. For example, if the facility routinely inspects its air pollution control devices as a requirement of its CAA permit, that

same inspection, with the possibility of a few additional observations, *e.g.*, to see if there is any evidence of run off, should also be accepted as part of the SWPPP. The SWPPP can cross reference inspection protocols for the CAA permit. Thus, EPA does not agree with the commenter that these requirements are either redundant, inappropriate or extend EPA authority.

Section 6.G. Sector G —Metal Mining (Ore Mining and Dressing)

Comment a: Include Table G-4, published in the August 7, 1998 modifications, in MSGP-2000. Also, table titles in this section are confusing since they appear to imply that effluent guideline limitations apply to waste rock and overburden piles.

Response a: We have included the revised table G-4 from the August 7, 1998 modification in the fact sheet for today's permit. The titles of tables G-1 and G-2 are consistent with the titles in the other sectors of the final permit. All monitoring tables in Part 6 of the permit are titled "SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING." The Agency doesn't not believe that this title is misleading because each table contains a column labeled "Numeric Limitation" which either contains a numerical value or is blank. For those Sectors where there are no values listed in the numeric limitation column it is clear that numeric limitations do not apply. EPA recognizes that benchmark concentrations are not effluent limitations and is provided specific language in the permit to that effect.

Comment b: The commenter opposes EPA's disallowance of sampling waivers from monitoring requirements for waste rock and overburden piles. Another commenter argued that another waiver based on "not present or no exposure" had also been deleted. A third commenter noted that monitoring requirements were also inconsistent with the 1998 permit modifications.

Response b: The restriction on sampling waivers was not intended to exclude the "Adverse Climatic Conditions Waiver" in Part 5.3.1 of the permit. The final permit has been revised to correct this error. Also, Part 6.G.7.2 has been modified to reflect that the monitoring requirements only apply to discharges from active ore mining and dressing facilities and that these requirements remain unchanged from the 1998 permit modification. The second waiver in Part 5.3 which is based on "not present or no exposure" was not part of the August 1998 notice, and was not intended for sector G facilities.

Comment c: The limitation on coverage for adit drainage and contaminated springs or seeps should be modified to exclude only those that do not result from precipitation events. The proposed Certification of Discharge language is confusing since it implies an obligation for testing or evaluation of mining-related discharges that are composed entirely of non-storm water covered by an NPDES permit.

Response c: Adit drainage and contaminated springs and seeps are discharges that originate below the surface of the ground. Often they discharge during dry periods and, while in some instances these flows may increase in response to a storm event, they may continue to flow well after the precipitation has ended. Therefore, EPA has determined that the restriction (*i.e.*, prohibition) for MSGP coverage of discharges from adit drainage, contaminated springs and seeps should remain as proposed.

The "Certification of Discharge Testing" language has been modified to clarify that certification must be provided to show that any mining-related discharge has been "tested or evaluated for the presence of non-storm water discharges." Additional wording has been added to Part 6.G.6.1.6.6 to make it consistent with the language in the 1995 MSGP.

Comment d: Provide guidance in Section 6.G.6.1.6.6 on what type of test should be performed.

Response d: The language has been modified to allow for a certification based on "tested or evaluated" information. Additional wording has been added to Part 6.G.6.1.6.6 to make it consistent with the language in the 1995 MSGP.

Comment e: The definition of "reclamation phase" is inconsistent with most state programs.

Response e: The definition of the three general phases of mining was taken from the fact sheet to the 1995 MSGP. The intent was to recognize that "mining" is comprised of several distinct activities, not to set a standard for each phase. EPA acknowledges that reclamation requirements are typically set by state programs, and therefore the permit language defining the reclamation phase has been modified to reflect other post-mining land uses.

Comment f: In reformatting the permit language, EPA introduced new requirements which are inconsistent with the settlement EPA reached with NMA in 1998.

Response f: The draft MSGP-2000 intended to incorporate all the requirements from the 1998 notice resulting from the settlement with

NMA. However, in making the changes and converting to a more "readable" format some unintended errors occurred. The revisions to the monitoring requirements have been made so the final permit language is consistent with the 1998 **Federal Register** publication (63 FR 42534, Aug 7, 1998).

Comment g: Delete the phrase "directly or indirectly" from coverage of "storm water discharges that have come into contact (directly or indirectly) with any overburden, raw material, intermediate product* * *" since it is inconsistent with prior versions of the permit.

Response g: The storm water regulations (Section 122.25(b)(14)(iii)) require permit coverage for "facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products* * *" When revisions were made to the draft MSGP 2000 language to make the permit more "readable," some of the words were changed. In order to be consistent with the storm water regulations, the permit language has been revised. The words "come into contact (directly or indirectly)" have been deleted and replaced with "contaminated by contact or that has come into contact."

Comment h: EPA was incorrect in stating that all facilities permitted in this sector are "no discharge" facilities.

Response h: The monitoring discussion in the Fact Sheet to the permit is a summary of the data available at the time the draft permit was published for public comment. The main focus of the summary was on data from the second year of permit coverage. Of those sector G facilities that submitted information in year 2 of the permit none of them reported a discharge. The 1998 MSGP modification which reflected the settlement with NMA and added monitoring requirements for sector G was much later in the permit term. The final fact sheet language has been changed to recognize the later data and discharge status of sector G facilities covered by the permit.

Comment i: Water technically qualifying as mine drainage but which meets all applicable surface water quality standards should be approved for use in lieu of fresh water for dust control on roads at mine sites.

Response i: The quality of the mine drainage can change from source to source and over time within the same mine. The MSGP would need to specify a process (*e.g.*, monitoring frequency) to ensure that the quality of the mine

drainage is protective of water quality. This type of facility specific considerations and potential monitoring requirements would be better addressed under an individual permit issued to the facility.

Sections 6.G and 6.J Construction Requirements for Sector G—Metal Mining and Sector J—Mineral Mining

Comment a: Commenters questioned why EPA was requiring coverage under a construction general permit for earth disturbing activities during the “exploration and construction phase” of a mining operation.

Response a: This requirement was originally contained in the 1995 MSGP Fact Sheet for Sector J (it was inadvertently not duplicated in the metal and coal mining [Sector G] sectors). It therefore represents a clarification or technical correction to the original MSGP. To clarify the applicability of the MSGP regarding construction activity at metal mining sites and to make metal mining requirements consistent with mineral mining provisions (Sector J), Sector G has been modified to indicate that earth-disturbing activities occurring in the “exploration and construction phase” of a mining operation must be covered under EPA’s Construction General Permit (63 FR 7858, February 17, 1998) or under an individual permit if the area disturbed is one acre or more. Earth-disturbing activities during exploration/construction affecting less than one acre must be covered under the MSGP-2000. If permittees then opt to actively mine the site they are required to transition to the MSGP-2000 (they should terminate their coverage under the CGP, but there is no requirement to do so). This procedure removes commenters’ “dual-permit requirement” fear. Once in the active phase, any subsequent mine enlargement would be covered under the MSGP-2000. All phases of a mining operation must be covered which includes the “reclamation phase.” EPA believes the appropriate level of environmental protection for initial land-disturbing mining activities is a construction permit. SWPPP requirements under a construction permit are more effective for the often temporary conditions found during the initial phase versus that which would be appropriate for a more permanent mining operation. Many of the BMPs and other SWPPP requirements of the Construction General Permit could be incorporated in the MSGP-2000 SWPPP, thereby minimizing any duplicative efforts.

Comment b: For Sector J for Region 9, the proposed MSGP only authorized

mine dewatering discharges from crushed stone, construction sand and gravel, and industrial sand mines in Arizona. For Regions 1, 2, 6, and 10, coverage was proposed throughout the areas of these regions covered by the MSGP. Expressions of interest in MSGP coverage for these discharges have been received for other areas, such as Indian country in Nevada and California.

Response b: For consistency with the other regions, coverage for the discharges has been extended throughout the areas of Regions 3, 8 and 9 covered by the permit, provided the dischargers meet all other permit eligibility requirements.

Section 6.I Sector I—Oil and Gas Extraction

Comment: One commenter expressed concern that while refineries were covered under Sector I—Oil and Gas Extraction, refining was not usually considered “oil and gas extraction” and the title of Sector I could thus cause refinery operators to overlook permit conditions that could apply to them.

Response: EPA welcomes this suggestion to make the permit easier to use and the title for Sector I has been changed to “Oil and Gas Extraction and Refining” in Table 1-1 and in Part 6.I. Note however, that any storm water at a refinery that is subject to storm water effluent limitation guidelines at 40 CFR 419 is not eligible for permit coverage.

Section 6.R Sector R—Ship and Boat Building or Repair Yards

Comment: One commenter requested that the provisions of part 6.R.4.3.1. be clarified to note that pressure washing to remove paint would require a separate NPDES permit.

Response: EPA agrees that if pressure washing occurs to remove paint, the discharge of that wash water would require separate NPDES permit coverage. EPA also intends for the discharge of wash waters removing marine growth to be permitted separately. The source of the discharge is not storm water and, as a general rule, the MSGP only authorizes the discharge of storm water. The non-storm water discharges that are authorized by the MSGP are a specific list found in Part 1.2.2.2. of the permit and the list does not include pressure wash waters.

Section 6.S Sector S—Air Transportation

Comment: Commenters had concerns regarding the execution of site compliance evaluations and inspections of deicing areas. They also requested EPA to limit the inspection obligation to

once per month during periods of deicing operations.

Response: The MSGP-2000 has been clarified to state that compliance evaluations shall be conducted during a period when deicing activities are likely to occur (vs. a month when deicing activities would be atypical or during an extended heat wave), not necessarily during an actual storm or when intense deicing activities are occurring. This requirement is not seen as onerous, as EPA believes that most weather conditions can be reasonably anticipated and the evaluation can be planned for. EPA generally agrees that regularly scheduled, monthly inspections of deicing areas during the deicing season (e.g., October through April) are sufficient at airports with highly effective, rigorously implemented SWPPPs. However, if unusually large amounts of deicing fluids are being applied, spilled or discharged, weekly inspections should be conducted and the Director may specifically require such weekly inspections. In addition, personnel who participate in deicing activities or work in these areas should, as the need arises, inform the monthly inspectors of any conditions or incidents constituting an environmental threat, especially those needing immediate attention. EPA requires permittees to record, to the best of their ability, the quantity of all deicing chemicals applied on a monthly basis (not just glycols and urea, e.g., potassium acetate), as discharges of large quantities of these chemicals can have an adverse impact on receiving waters. The capability to record usage of chemicals should not depend on the type of chemical used. EPA never intended to provide a comprehensive list of technologies and BMP options for airport operators to consider, nor to provide a discussion of the relative merits of each. EPA’s discussion was simply an introduction of the many options available and was intended to stimulate thought on the variety of BMPs available. EPA intends that storm water personnel use their best professional judgment to select site-appropriate measures for inclusion in their SWPPPs. For a more thorough source of information on deicing fluid control and airport deicing operations in general, stakeholders can check the EPA publication “Preliminary Data Summary, Airport Deicing Operations” at <http://www.epa.gov/ost/guide/airport/index.html>.

Section 6.T Sector T—Treatment Works

Comment: Clarify that treatment works smaller than 1.0 MGD are not

defined as industrial activities and, therefore, are not subject to the permit.

Response: The final permit language has been modified to be consistent with the industrial definition of § 122.26(b)(14)(ix). The requirements of Sector T are intended to apply only to those treatment works with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program.

Section 8 Retention of Records

Comment: Clarify the Retention of Records language.

Response: EPA has clarified the Retention of Records language used in this permit. Part 8.1 states that the permittee will retain, for three (3) years after the permit expires or is terminated, the SWPPP and all documents/reports needed to complete their Notice of Intent form. In addition, Part 9.16.2.1 addresses the retention of records for the permit monitoring requirements for three (3) years from the date of sample, measurement, evaluation or inspection, or report. Permittees are required to submit Discharge Monitoring Reports for compliance and/or analytical monitoring.

Section 9 Standard Permit Conditions

Comment a: Several comments were received on Part 9.12.1 for requiring coverage under an individual permit or an alternative general permit. Commenters suggest that the permittee be allowed to appeal a Director's decision; provide for determination of non eligibility and semblance of surety available by a permittee who demonstrates eligibility and compliance with the MSGP; and authorize automatic transfer provided all storm water permitting conditions and obligations are met.

Response a: EPA may modify, revoke and reissue, or terminate a permit during its term. Causes for modification, revocation and reissuance, and termination are set forth in 40 CFR § 122.62 and 122.64. Specific causes may include: noncompliance by the permittee with any condition of the permit; failure in the application or during the permit issuance process to disclose fully all relevant facts; determination that the permitted discharge endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or there is a change in any condition that requires either a temporary or a permanent reduction or elimination of any discharges controlled by the permit. In addition, EPA recently published a final rule which revises certain regulations

pertaining to the NPDES program, including the procedures for appealing an EPA determination on NPDES permits. See *Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations; Round II*, 65 Fed. Reg. 30886 (May 15, 2000). Included in the rule are revisions to the permit appeals process that replace evidentiary hearing procedures with direct appeal to the Environmental Appeals Board (EAB). The website for the EAB is "http://www.epa.gov/eab/". The webpage has a frequently asked question section, "http://www.epa.gov/eab/eabfaq.htm". Questions 1 through 9 deal with filing issues, which the commenter can refer to for instructions on how to proceed in filing an appeal with EAB. EPA does not allow automatic transfer from individual permits into other individual or general permits since EPA needs to maintain adequate records of permittees and make periodic evaluations of the adequacy of their measures to comply with permit requirements.

Comment b: EPA should extend coverage to facilities wishing to apply after the expiration date of the MSGP until the permit is reissued.

Response b: Where EPA fails to reissue a permit prior to the expiration of a previous permit, EPA has the authority to administratively extend the permit for facilities already covered. However, EPA does not have the authority to provide coverage to "new" facilities seeking coverage under an expired permit. This concern is not applicable in this instance to the MSGP since the MSGP-2000 was issued before the MSGP-1995 expired.

Section 13 Permit Conditions Applicable to Specific States, Indian Country Lands

Comment: The Agency should not require compliance with provisions of state rules that it cannot specifically identify. For example, EPA requires compliance with state anti-degradation provisions. The Agency provides no assistance with regard to how a small business might somehow ascertain what those provisions are, who has them, and how they might apply to the facility's discharge. See 65 Fed. Reg. at 17021. The Agency must specify precisely how a company would obtain appropriate data and how it should apply that data to its operations. Without this necessary guidance, this new provision should be removed from the final permit.

Response: The permit states that discharges are not covered if they violate, or contribute to the violation of, a state water quality standard. An anti-degradation policy is one component of

a state's water quality standards program. The permittee is responsible for checking to ensure compliance with these provisions. Facility operators can check with the EPA official listed in this permit to obtain the name of the appropriate state contact.

Section I.A General Opposition to Proposed Changes

Comment: A commenter objected to several of the proposed modifications to the "Limitations on Coverage" provisions in the Proposed MSGP-2000, including the proposed revisions to the Endangered Species Act requirements (Section 1.2.3.6), the addition of the antidegradation provision (Section 1.2.3.9), the addition of the impaired waters and TMDL provisions (Section 1.2.3.8), and the addition of the compliance with water quality standards provisions in Section 3.3.

Response: The Agency acknowledges the comment. Justifications for each of the positions cited by the commenter are provided in the fact sheet accompanying the permit. Specific objections to these provisions are addressed elsewhere in the comment response document.

Section I.B General Support to Proposed Changes

Comment a: Several commenters supported EPA's continued use of a general NPDES permit for regulating storm water discharges associated with industrial activity. The commenters indicated that this was an efficient and effective means for achieving the goals of the Clean Water Act.

Response a: EPA agrees with the commenters regarding the appropriateness of general permits for the majority of industrial storm water discharges. The issuance of the final MSGP is consistent with these comments.

Comment b: A commenter supported the proposal to authorize incidental windblown mist discharges from cooling towers as an authorized non-storm water discharge under the MSGP.

Response b: These discharges are included in the final MSGP consistent with the recommendation of the commenter.

Comment c: A commenter supported the provision in the proposed MSGP to allow termination of permit coverage based on the "no exposure exemption" (40 CFR 122.26(g)) provided under EPA's Phase II storm water regulations of December 8, 1999 (64 Fed. Reg. 68722).

Response c: Although the no exposure exemption would be available whether or not it is specifically included in the

MSGP, EPA has retained the provision in the final MSGP to highlight its availability for those facilities which qualify.

Section I.C Fact Sheet

Comment a: It is imperative that EPA conduct an environmental justice analysis for the MSGP to ensure that the permit is consistent with the goals of EPA's Environmental Justice Strategy of April 3, 1995, the President's 1994 Executive Order on Environmental Justice and Title VI of the Civil Rights Act. The notice of intent (NOI) must include demographic information. EPA must seek comments of minority and low-income communities regarding the MSGP.

Response a: EPA disagrees with the commenter that an environmental justice analysis is necessary prior to the reissuance of the MSGP. Regarding Title VI requirements, EPA has recently proposed guidance (65 *Fed. Reg.* 39649, June 27, 2000) for assisting recipients of Federal funding which administer environmental programs (such as state environmental agencies), as well as guidance for investigating alleged disparate environmental impacts stemming from permitting programs administered by these agencies. The guidance is also appropriate for EPA permits, such as the MSGP.

The Title VI guidance encourages permitting authorities to integrate environmental justice into their permitting programs. However, an environmental justice analysis is not required for every permit issued by a state permitting authority or by EPA. No information was provided by the commenter that a disparate impact on minorities would exist as a result of the MSGP. The MSGP includes numerous effluent limitations and other conditions which should be protective of water quality for all neighborhoods in which permitted facilities are present. EPA does intend to integrate environmental justice considerations explicitly into its permitting programs as outlined in the Title VI guidance. However, this will likely be a longer term process (extending beyond the time frame for reissuance of the MSGP) given the many complexities of the issue.

EPA's Environmental Justice Strategy of April 3, 1995 (developed pursuant to the President's 1994 Executive Order) has similar goals as Title VI of the Civil Rights Act. Again, however, an environmental justice analysis is not required for every permit issuance. The integration of the goals of the Environmental Justice Strategy into the NPDES permit program will also take

time given the many complexities of the environmental justice issue.

EPA is committed to implementing the Executive Order on Environmental Justice. As a practical matter, environmental justice concerns are community specific. EPA will work with a specific community that may express concerns related to a specific source or other environmental burdens. If and when a community raises such issues, EPA can then consider a proper course of action. In the case of the MSGP which will largely permit existing facilities, EPA will engage the community that has raised the issue and, if appropriate, work with the State and local agencies to address their concerns. If violations of any applicable standards are identified, EPA can pursue possible enforcement actions. The MSGP also provides that an alternate general permit could be issued for any geographic area which may be identified in the future as subject to disparate environmental impacts.

EPA has public noticed its intent to reissue the MSGP and has requested comments throughout the areas potentially affected by the permit, including areas where minority and low-income communities are present. EPA believes that its outreach activities have been sufficient for the permitting action which was proposed. However, EPA's Environmental Justice Strategy also provides for additional outreach activities in the future which may include outreach to minority and low-income communities specifically regarding the MSGP.

EPA disagrees that demographic information should be required with the NOI. The NOI does include location information for industrial facilities seeking coverage under the permit. Using this information it is possible to locate facilities covered by the permit relative to the locations of different demographic groups. As such, it is not necessary for the NOI to include demographic information.

Comment b: A commenter expressed concern that some non-storm water discharges may be improperly characterized as storm water by certain facilities. The commenter recommended that EPA carefully review permit applications and conduct inspections to ensure that such discharges are treated as point source discharges and not covered by the MSGP.

Response b: Point source discharges would violate the Clean Water Act unless they are authorized by a separate NPDES permit. The MSGP also requires that operators review their facilities for the presence of unpermitted non-storm water discharges which are not

authorized by the MSGP. When such discharges are located, the MSGP requires that the discharges be permitted or terminated. This requirement should minimize the possibility that inappropriate non-storm water discharges are discharged under the MSGP. As recommended by the commenter, EPA does conduct periodic inspections of facilities permitted under the NPDES permit program to evaluate the compliance status of a facility with the requirements of the Clean Water Act, including the presence of any unpermitted discharges. Although the permit application for the MSGP (the notice of intent) does not specifically address the issue of non-storm water discharges, EPA believes that the other requirements of the MSGP, along with EPA's inspection program, adequately address the commenter's concern.

Section II.A Organization and Clarity

Comment a: Virtually all commenters supported EPA's effort to make the MSGP smaller and easier to understand. Several comments did express concern that the reorganization and clarification of the permit may have resulted in some substantial changes in permit requirements that may not have been identified and explained in the preamble to the proposed permit. The issue of whether or not explanation and guidance contained in the 1995 MSGP preamble could still be relied upon was also raised.

Response a: EPA went to great lengths to make the permit shorter and easier to understand and believes all substantive changes were identified and discussed in the preamble to the proposed permit. Responses to specific comments on areas where a commenter felt that adequate explanation for changes was not included in the proposal are provided in responses to that comment. With regard to the more specific explanation of sector-specific activities, etc. in the preamble to the 1995 MSGP, this information was incorporated by reference into the proposal of today's permit and may still be relied upon to the extent it does not conflict with the MSGP-2000 documents or is superseded by later guidance. Commenters noted several instances where EPA unintentionally changed requirements through the reformatting. EPA has corrected the permit and identified these instances throughout the comment response document.

Comment b: Based on EPA's use of incorporation by reference in the proposed permit's preamble to avoid reprinting material from the 1995 MSGP's preamble, one commenter expressed concern that the requirement

in Part 4.7 to have a copy of the final permit with the Storm Water Pollution Prevention Plan would be difficult if the entire permit was not in a single package. This commenter also was concerned that references to multiple Internet sites for more information would further compound this problem. The commenter further suggested that a copy of the permit and relevant guidance be included with the NOI "confirmation" letter sent by EPA in response to a complete NOI. Another commenter supported making all relevant information available in a single document.

Response b: The entire permit, appropriate addendums, the preamble "fact sheet," and comment response summary are being published today in the **Federal Register** and will, therefore, be easily available from several Internet sites and from Federal Depository Libraries. The information not repeated in the proposed permit notice was primarily background and fact sheet information from the preamble to the 1995 MSGP. While the preamble and response to comments sections of the final permit notice will undoubtedly be valuable to many permittees, the Part 4.7 requirement to have a copy of the permit language with the Storm Water Pollution Prevention Plan refers only to the permit language itself, including addendums. Based on experience with the previous permit, EPA believes the benefits of keeping the size and complexity of the permit to manageable (*i.e.*, less intimidating, easier to use) level far outweigh the benefit of making all supporting and guidance information, much of which will apply to only a small portion of potential permittees, available in a single document. EPA does expect that for convenience, many permittees will simply attach a copy of the entire **Federal Register** notice of the final permit to comply with Part 4.7.

EPA believes the references throughout the permit and preamble to various Internet sites is a sensible alternative to publishing information, only a small part of which may apply to any one facility or which will be changing over time and quickly become outdated. For example, due to periodic updates that must be made to the endangered species list based on new species being listed or old ones delisted, the county-species list was not published with the final permit. This omission saves tax dollars on publication, keeps the size of the permit package down (the current list would double the size of the permit while any one facility only needs to look at a page or so of information), and avoids the

inadvertent use of an outdated species list that could result not only in failure to consider potential adverse effects on an endangered species, but also negate a discharger's permit coverage. EPA relies heavily on electronic distribution of documents and guidance, but will be able to provide hard copy or telephone-based information to those who have no access to the Internet or Federal Depository Libraries.

As noted above, the complete permit has been printed and EPA intends to make guidance available, primarily through the Internet. The suggestion to include a copy of the permit and guidance with the NOI "confirmation" letter is impractical since most of this information would have been necessary to develop the Storm Water Pollution Prevention Plan that must be developed before the NOI can be submitted.

Section III Geographic Coverage of Proposed MSGP

Comment: Several commenters and attendees of meetings on the proposed permit identified an inconsistency between Part 6.J.3 of the permit, where mine dewatering discharges from construction sand and gravel, industrial sand, and crushed stone mines were apparently eligible only in Arizona and both the previous permit and the preamble to the proposed MSGP-2000 where such discharges were also eligible in all of the permits for Region 1, 2, 6, and 10. One commenter referred to pages 17025 and 17034 of the preamble to the proposed permit in support of their belief that the proposed permit had been intended to provide coverage in Regions 1, 2, 6, and 10 and in Arizona.

Response: The typographical error in Part 6.J.3 has been corrected. As supported by item 4 on page 17025 and item 2 on page 17034 of the **Federal Register** notice of the proposed permit (65 FR 17025 and 17034), coverage for mine dewatering discharges from construction sand and gravel, industrial sand, and crushed stone mines in not only Arizona, but also Regions 1, 2, 6, and 10 was intended.

Section V.A Historic Preservation

Comment a: It would be more in keeping with balancing the agency's CWA mandate and NHPA obligation to not preclude general permit coverage for those discharges that may affect historic properties. Instead, require the general permittee to notify the agency of the existence of a listed historic property that will be affected along with any preventive or mitigation measures, if necessary, that it plans to implement. EPA could then decide if any further consideration or action is warranted,

including any comment by the Council. The obligations established under § 106 are placed upon the agency, not on the permittee.

Response a: EPA agrees and acknowledges that NHPA Section 106 imposes obligations only on federal agencies and not on third parties. EPA's action in issuing permits, however, triggers NHPA Section 106. In order to issue a general permit, EPA included historic preservation-related application and eligibility provisions in order to ensure that it could "filter" out permitting activities that might otherwise trigger advanced procedures under NHPA Section 106. Section 110(k) of the Act prohibits a Federal agency from granting a loan, loan guarantee, permit, license or other assistance to an applicant who intends to avoid requirements of section 106 (64 FR 95 May 18, 1999). To meet this responsibility, EPA requires the applicant to do one of the following: (1) Determine that historic properties are not in the path of permit activities, (2) determine that permit activities have no impact on historic properties, or (3) the permittee reaches agreement with appropriate authorities on measures to mitigate or prevent adverse effects. Thus, it is quite possible for facilities having an impact on historic properties to be covered by the MSGP. Authorization to discharge under the MSGP is a privilege, not a right, which carries with it certain procedural and timing advantages for the permittee. Therefore, it is incumbent upon the permittee, not EPA, to conduct whatever investigations and consultations are necessary consistent with EPA's obligation to satisfy NHPA provisions.

Comment b: The notice states that the provisions in Part 1.2.3.7, are "likely to change as a result of consultations" under the NHPA. The procedures set forth in Addendum B are described as being "models" of what the NHPA guidance "may look like." These provisions are critical for permittees to determine their eligibility for coverage under MSGP-2000, and any substantive changes in these areas should be subject to review and comment by the regulated community before they are adopted.

Response b: There are no changes to these provisions as a result of NHPA consultations.

Comment c: Part 2.1.2.2, which deals with discharges that are authorized under the 1995 MSGP, but not clearly eligible for coverage under this permit, does not allow adequate transition time for those permittees who do not have up-to-date determinations pursuant to the NHPA.

Response c: Within 90 days the permittee must apply for MSGP coverage and certify his compliance with other permit provisions. He then has up to 180 additional days of interim coverage under the MSGP while he conducts the consultation and determines whether he meets the criteria for coverage under the MSGP. EPA believes that 270 days is a sufficient period to conduct and conclude this consultation and take whatever action is necessary to ensure continued permit coverage.

Comment d: EPA states that, "For existing dischargers * * * a simple visual inspection may be sufficient * * *" (emphasis added). This statement is somewhat disingenuous because a "simple visual inspection" is rarely sufficient to determine historic eligibility of an area because many historic resources are often located underground. EPA should provide reasonable guidance worded specifically to shield permittees from liability.

Response d: EPA believes that, for existing dischargers who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for facilities which are new industrial storm water dischargers and for existing facilities which are planning to construct BMPs for permit eligibility, applicants should conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, applicants should first determine whether there are any historic properties or places listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing"). Thus, the Agency does not imply that a visual inspection is always sufficient. In instances of uncertainty, the permittee is encouraged to consult with authorities who can advise on the likelihood of historic properties above or below ground.

Given the Agency's obligation to comply with the NHPA and its efforts to coordinate that obligation with the implementation of general permits, the historic preservation-related eligibility restrictions cannot provide an ironclad shield from liability. The permit guidance provides a common sense approach to an historic property assessment. Facility operators are encouraged to consult with local authorities who can advise on the likelihood of historic properties at the facility.

Comment e: Portions of the text are reproduced and other portions not

reproduced in columns 1 and 2 of page 17018 of the notice. See 65 F.R. at 17018. Due to this problem, the commenter is unable to provide any comments on EPA's proposed new changes to the MSGP since he is uncertain what EPA intends or proposes. The commenter suggests that EPA fix the language related to the proposed MSGP and re-issue that correction for public review and comment.

Response e: EPA apologizes for the typing error which resulted in a number of sentences being listed twice on p. 1018. Despite this confusion, EPA believes the intent of the section is clear and does not require reproposal.

Section V.B Endangered Species

Comment a: The term "unacceptable effects" is used almost interchangeably with "likely to adversely affect" (See 65 Fed. Reg. 17051), which is similarly undefined in the permit and in pertinent regulation. The correct term for purposes of ESA compliance is the "no jeopardy" standard set forth in Section 7 of the ESA (17 U.S.C § 1536(a)(2)).

Response a: EPA agrees with the commenter regarding the term "avoid unacceptable effects." Therefore, EPA has deleted the term and uses the "no jeopardy" language as stated in part 1.2.3.6.6.

Comment b: The definition of "discharge-related activities" is so all-encompassing that it could include virtually all activities at a mine, from drilling and blasting to loading, hauling and dumping and equipment maintenance, in addition to any activities that are part of a Storm Water Pollution Prevention Plan (SWPPP). There is no justification for a requirement to certify ESA compliance for all of these activities in order to obtain coverage under the MSGP. This requirement clearly exceeds EPA's authority under the Clean Water Act.

Response b: The endangered species provision covers only those activities that are associated with storm water industrial activity. The phrase "discharge-related activities" is intended to clarify that EPA considers a broad range of activities related to storm water discharges to be covered by the permit and, therefore, subject to ESA and NHPA provisions. This broader list of activities could result in environmental impairment if not addressed through a SWPPP. Since the permit covers this broad range, and EPA's permit authority is subject to ESA provisions, then this broader range of activities is subject to the "no jeopardy" finding. BMPs, whether already in place

or added, which serve to satisfy the criteria for coverage under the MSGP, are thus subject to the endangered species provisions.

Comment c: While transitional discharge authorization is available for up to 270 days from the date of publication of the permit in the **Federal Register**, that transitional coverage is only available if the permittee submits an application for an alternative permit (most likely an individual permit) within 90 days after publication. Since formal Section 7 consultation is nominally a 135-day process (as stated in the Construction General Permit, see 63 Fed. Reg. 7872), permittees, in order to ensure continuous coverage, would be required to prepare and submit an application for an individual permit before they knew whether they were eligible for coverage under MSGP-2000. This is an unnecessary burden, on both the permittee and the agency. EPA should extend these time limits—for submission of an application for an alternative permit to 180 days, and for transitional coverage to one year.

Response c: EPA will retain the requirement that all applicants must submit their Notice of Intent (NOI) in 90 days. Those applicants who are entering into endangered species consultations or adverse impact investigations could apply for extensions up to 180 days and be covered by an interim permit until their application is completed. EPA believes that 270 days is a sufficient period to conduct and conclude this consultation and take whatever action is necessary to ensure continued permit coverage. The County Species list is available on EPA's web site or by contacting a local official. EPA will update its web site list every 90 days.

Comment d: EPA indicates that the proposed species-related requirements could change, before final issuance, based on consultation with the Fish and Wildlife Service. The public will not have an opportunity to participate in that process, including through commenting on any additional requirements suggested by the Service. If the Service does suggest any substantial changes in MSGP-2000, the public should have an opportunity to review and comment on those changes before EPA makes a decision as to whether to incorporate them into the final permit.

Response d: There are no changes to these provisions as a result of NHPA and ESA consultations, except that, based on comments to the proposed permit, EPA has deleted the inclusion of proposed species on the endangered species list.

Comment e: The duty triggered by the section of the Endangered Species Act (ESA) upon which EPA relies falls not upon the discharger but upon EPA. Thus under EPA's proposal, it would be EPA's duty to assess the impact of each discharger applying for coverage, and if this provision is not removed, EPA loses the benefit of the general permit. The action of adopting the general permit itself triggers EPA's duty, and so EPA, not the discharger, must assess ESA impacts now, not after the fact of the permit.

Response e: EPA is bound by the ESA and attempted to coordinate general permit implementation with its ESA obligations. Authorization to discharge under the MSGP is a privilege which carries with it certain procedural and timing advantages for the permittee. Therefore, it is incumbent upon the permittee, not EPA, to conduct whatever investigations and consultations are necessary to satisfy the ESA-related eligibility provisions. Since EPA cannot predetermine which facilities will apply for coverage under the MSGP, it is impossible for EPA to conduct the site-specific assessments required under the ESA at the time of general permit issuance.

Comment f: Despite previous consultation on the problems of earlier MSGP drafts, certain problems persist, including the gray area language that has fueled citizen suits against permittees. Not only has the agency failed to adequately address this issue, it has increased the liability potential by increasing the requirements for permittees to comply with other agency rules. EPA should clarify language to eliminate the potential for liability for permittees and should reduce the cost and paperwork burdens for compliance with ESA and NHPA.

Response f: Given the operation of the regulatory innovation, the "general permit," EPA cannot provide an ironclad shield from liability in the way the commenter proposes. The permit guidance provides a common sense approach to endangered species and historic property assessments. Facility operators are encouraged to consult with local authorities who can advise on the likelihood of endangered or threatened species, critical habitat, or historic properties at the facility. EPA believes the additional burden associated with the expanded NOI form is minimal because permittees are required to make the findings which are reflected on the form. The additional information provides greater assurance that the assessment has been conducted, but does not in itself constitute the requirement for the assessment. EPA

acknowledges that, until such time as the revised form has been cleared by OMB, permittees will continue to use the current NOI form (as modified slightly to conform to changes made elsewhere to the permit).

Comment g: The endangered species section of the permit relating to endangered species is cumbersome and appears to go beyond the intent of the Clean Water Act and beyond the EPA's authority set in the CWA.

Response g: EPA acknowledges the comment, but disagrees. EPA believes these provisions are essential to carry out its responsibility not to issue a permit which could jeopardize an endangered or threatened species, or critical habitat. EPA has consulted with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to ensure compliance with the Endangered Species Act. The "discharge-related activities" restriction on eligibility also implements the Agency's obligations under NHPA Section 106.

Comment h: The permit should clarify that coverage of the MSGP, and certification by the permittee, need address only new impacts resulting from new changes in operations for which discharges are covered and authorized by the MSGP. In other words, the "baseline" for assessment of effects or impacts should be the date of reissuance of the MSGP or, if later, initiation of new activities to be covered by the MSGP.

Response h: All activities covered by the permit, whether new or existing, are subject to the provisions. It is inappropriate to interpret that these provisions apply only to new activities.

Comment i: The endangered species section suggests that a potential permittee utilize "due diligence" in determining whether or not a potential impact to an endangered or threatened species may exist. This language is too vague and subjective—differing interpretations what constitutes due diligence exist. This is particularly true when dealing with an issue as complex as impact to endangered species or their habitats, where the expertise necessary to make this determination is usually beyond the reach of most industrial operators. It is likely that this could become the focal point of efforts to block permit issuance by those with differing agendas. Further clarification of what is required under "due diligence" is required.

Response i: EPA believes that the language must provide flexibility to reflect the case-by-case decisions which must be made. In response to the commenter's concern, EPA has replaced the "due diligence" phrase with "best

judgment." Consultations with local endangered species officials is advised if the permittee is uncertain how to apply these provisions to his facility.

Comment j: Only those species that have been listed should be identified on this list and used in the determination of permit coverage; not those that have not gone through the entire listing process.

Response j: EPA acknowledges the comment and has revised the language to exclude proposed listing requirements.

Comment k: In this section, an applicant is expected to determine whether endangered species are "in proximity" to the stormwater discharges or discharge-related activities at the facility. In proximity is described as being "in the path or down gradient" or in the "immediate vicinity of or nearby," the facility. These definitions are far too vague, and could refer to the presence of species located a considerable distance from a facility, not merely those located close enough to a facility to be affected by that facility's stormwater discharge. This section requires clarification.

Response k: EPA has retained this language from the 1995 MSGP. EPA believes that the language must provide flexibility to reflect the case-by-case decisions which must be made. Consultations with local endangered species officials is advised if the permittee is uncertain how to apply these provisions to his facility.

Comment l: This section provides that "where there are concerns that coverage for a particular discharger is not sufficiently protective of listed species (and presumably those proposed for listing as well) the Services (as well as any other interested parties) may petition EPA to require that the discharger obtain an individual NPDES permit and conduct an individual section 7 consultation as appropriate." It is clear that this will provide ample opportunity to those who would seek to delay or deny permit issuance, even in those circumstances where an actual impact to species or habitat does not exist. This procedure should be a formal one in which the permit remains in force until EPA, after careful and rigorous scientific evaluation of the potential impact, determines whether or not an impact exists and, if so, whether or not an alternative permit is warranted.

Response l: Opportunity for public input is an essential component of any government regulatory program. As the commenter suggests, the permit would remain in effect until such time as EPA

concludes that the activity is no longer eligible for coverage under the permit.

Section V.C 303(d)

Comment a: Several commenters challenged Parts 1.2.3.8. of the permit because they believe it inaccurately applies 40 CFR 122.4(i) regarding compliance with water quality standards to discharges covered by a general permit. Several commenters believe that one doesn't have to consider 40 CFR 122.4(i) if they only add an outfall and similarly one commenter believes that new dischargers under Phase 2 do not have to consider 40 CFR 122.4(i). Commenters stated that any provisions added to the reissued MSGP regarding impaired waters or TMDLs are premature until the new TMDL rule is final. It seems that the major concern is that previously unpermitted discharges would be disallowed coverage under this Part.

Response a: EPA, in Sections 1.2.3.8.1 and 1.2.3.8.2, was merely conditioning a discharger's eligibility for coverage under the MSGP upon meeting certain existing conditions and requirements in EPA's NPDES regulations which apply in all applicable circumstances involving both individual and general permits. In doing so, EPA intended to merely restate those existing conditions and requirements as eligibility requirements under the MSGP. Specifically, EPA's intention in section 1.2.3.8.1 was to condition a new discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory conditions under 40 CFR 122.4(i). A new discharger, therefore would not be eligible for coverage under the MSGP if its discharge would "cause or contribute to a violation of a water quality standard." As mentioned, this regulation is applicable to all new dischargers irrespective of the type of permit they are seeking coverage under; there is no language in this regulation that exempts new dischargers seeking coverage under a general permit. EPA, in section 1.2.3.8.1 of the MSGP, did not intend to create any confusion or change any existing interpretation of the current regulatory language referred to in that section. To avoid confusion EPA is therefore amending the language in section 1.2.3.8.1 to state that "you are not authorized to discharge if your discharge is prohibited under 40 CFR 122.4(i)."

EPA's intention in section 1.2.3.8.2 was to condition a discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory requirements under existing 40 CFR

122.44(d)(1)(vii)(B). This section of EPA's regulations requires permitting authorities to develop effluent limits in permits that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7" (EPA's existing TMDL regulations). This requirement applies to all NPDES permits both individual and general permits.

Comment b: One commenter expressed confusion about what is meant by "new discharges" as this term is not defined in 40 CFR 122.2.

Response b: The final permit will omit the term "new discharge" since it is not necessary for the requirement and it has caused confusion. Today's permit will change the term "new discharge" to simply "discharge" in the first sentence of Part 1.2.3.8.1.

Comment c: Eligibility restrictions of the permit should be limited to those discharges of pollutants actually listed in a TMDL.

Response c: Section 1.2.3.8.2 of the MSGP contains the eligibility requirement that discharges be consistent with an EPA established or approved TMDL. EPA agrees with the commenter's suggestion that Section 1.2.3.8.2 should clearly state that such requirement is only applicable to facilities discharging the pollutant for which the TMDL is established. EPA is therefore, adding this language to Section 1.2.3.8.2.

Comment d: Discharges to 303(d) listed or 303(e) listed waters should be monitored for contaminants that impair or threaten water quality; however, monitoring requirements should be relaxed for other contaminants that do not impair or threaten receiving water quality. Several commenters wanted either exclusive or additional monitoring of discharges to impaired waters for pollutants of concern in lieu of the eligibility requirements based on whether or not a facility causes or contributes to the impairment.

Response d: EPA acknowledges that the MSGP may not contain monitoring requirements for a pollutant for which a waterbody is listed as impaired. This does not eliminate the burden of the discharger in determining that its effluent does not cause or contribute to a violation of water quality standards. Section 1.2.3.8.1 in the MSGP is an eligibility provision which restates existing regulatory requirements, it does not create new restrictions on any dischargers. If a discharger cannot meet the eligibility requirements, then that discharger is not authorized to discharge under the MSGP. Under existing

regulations, EPA has the discretion to establish whatever eligibility requirements that it believes are appropriate. Section 1.2.3.8.1 is an eligibility provision that does no more than restate existing regulatory requirements as a condition of being authorized to discharge under the permit. It does not dictate, establish or restrict the use of any particular framework, effluent limits or permit conditions within the permit itself or describe or restate any new interpretation of the underlying regulations which it refers to.

Comment e: Several commenters were not clear how to determine or implement loadings imposed by TMDLs. Further they requested that loadings based on the TMDL be excluded from the MSGP and addressed separately so that the regulated community could have an opportunity to comment on them. One commenter stated that the eligibility requirement of Part 1.2.3.8. is not appropriate because there was no opportunity to comment on the TMDL.

Response e: It is not necessary that all dischargers receive individual wasteload allocations. EPA's regulations at 40 CFR 130.2 define a wasteload allocation as the portion of the receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. EPA has interpreted this regulation to mean that each point source must be given an individual wasteload allocation when it is feasible to calculate such a wasteload allocation. EPA believes that states may find it infeasible to calculate individual wasteload allocations for all point sources covered by a specific general permit. In that case, the TMDL would establish individual wasteload allocations for dischargers subject to individual permits whereas dischargers subject to a general permit would be accounted for in the aggregate under a single wasteload allocation specific to the general permit under which they are authorized to discharge.

In addition, wasteload allocations can be expressed in different ways, including, percent loading reductions. See 40 CFR 130.2(i) " * * * TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measures. * * *" Effluent limitations must be consistent with (but not identical to) the wasteload allocations in TMDLs. See 40 CFR 122.44(d)(1)(vii)(B). Effluent limitations for point source discharges of storm water may be narrative limitations that are expressed in terms of best management practices (BMPs). This policy is consistent with EPA's approach in its Interim Permitting

Approach For Water Quality-Based Effluent Limitations in Storm Water Permits (September 1996, EPA 833-D-96-001). This interim approach allows limits to be expressed in the form of BMPs as a means of satisfying the requirement that limits derive from and comply with water quality standards and are consistent with an EPA approved or established TMDL.

All dischargers who discharge the pollutant for which the waterbody is impaired must be accounted for in the TMDL. Every point source discharger located on the impaired waterbody and discharging the pollutant for which the waterbody is impaired must be accounted for under a wasteload allocation. The State may choose, however, to give a discharger a wasteload allocation that would not require any reduction in loading. In other words, all facilities discharging the pollutant for which the waterbody is impaired must be subject to a wasteload allocation but all facilities subject to a wasteload allocation may not be required to reduce their loads.

Comment f: Several commenters requested guidance on how to adequately evaluate a discharge's eligibility under Part 1.2.3.8 and 1.2.3.9 of the permit.

Response f: EPA intends the analysis to be similar to what a permittee under the previous MSGP had to do in accordance with Part I.B.3.f. of that permit. The applicant must avail himself of all discharge characterization data or estimation of discharge character and determine compliance. If the permittee is able to evaluate eligibility on his own because he has access to State Water Quality Standards, 303(d) lists, TMDLs etc. (all of which are available either from the permit issuing authority or in some cases, online) then he can make his determination, document the determination process in his pollution prevention plan, and sign the NOI. In other cases, the Director may notify him that he is not eligible for coverage if such a determination is made independently, and may require an application for an individual permit.

Comment g: One commenter requested confirmation that Part 1.2.3.8.1 applies to facilities constructed after August 13, 1979 that have not yet been issued an NPDES permit.

Response g: Part 1.2.3.8.1 applies to discharges, not facilities, that have begun after August 13, 1979 that have not yet been authorized by an NPDES permit.

Section V.D—Antidegradation

Comment a: The proposed requirements do not accurately reflect

States' anti-degradation policy. Commenters stated that anti-degradation does not hold a permittee accountable until a State's policy is interpreted into a permit. The State's review of the general permit under the CWA 401 is the extent of applicable anti-degradation review. Therefore, delete Part 1.2.3.9, since an individual discharger applying for general permit coverage cannot determine how the State's anti-degradation policy, especially regarding the Tier 2 "high quality water" provisions, will be implemented at a particular facility.

Response a: EPA, in Sections 1.2.3.8.1 and 1.2.3.8.2, was merely conditioning a discharger's eligibility for coverage under the MSGP upon meeting certain existing conditions and requirements in EPA's NPDES regulations which apply in all applicable circumstances involving both individual and general permits. In doing so, EPA intended to merely restate those existing conditions and requirements as eligibility requirements under the MSGP. Specifically, EPA's intention in section 1.2.3.8.1 was to condition a new discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory conditions under 40 CFR 122.4(i). A new discharger, therefore would not be eligible for coverage under the MSGP if its discharge would "cause or contribute to a violation of a water quality standard." As mentioned, this regulation is applicable to all new dischargers irrespective of the type of permit they are seeking coverage under; there is no language in this regulation that exempts new dischargers seeking coverage under a general permit. EPA, in section 1.2.3.8.1 of the MSGP, did not intend to create any confusion or change any existing interpretation of the current regulatory language referred to in that section. To avoid confusion EPA is therefore amending the language in section 1.2.3.8.1 to state that "you are not authorized to discharge if your discharge is prohibited under 40 CFR 122.4(i)."

EPA acknowledges that the MSGP may not contain monitoring requirements for a pollutant for which a waterbody is listed as impaired. This does not eliminate the burden of the discharger in determining that its effluent does not cause or contribute to a violation of water quality standards. Section 1.2.3.8.1 in the MSGP is an eligibility provision which restates existing regulatory requirements, it does not create new restrictions on any dischargers. If a discharger cannot meet the eligibility requirements, then that discharger is not authorized to discharge

under the MSGP. Under existing regulations, EPA has the discretion to establish whatever eligibility requirements that it believes are appropriate. Again, section 1.2.3.8.1 is an eligibility provision that does no more than restate existing regulatory requirements as a condition of being authorized to discharge under the permit. It does not dictate, establish or restrict the use of any particular framework, effluent limits or permit conditions within the permit itself or describe or restate any new interpretation of the underlying regulations which it refers to.

EPA's intention in section 1.2.3.8.2 was to condition a discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory requirements under existing 40 CFR 122.44(d)(1)(vii)(B). This section of EPA's regulations requires permitting authorities to develop effluent limits in permits that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7" (EPA's existing TMDL regulations). This requirement applies to all NPDES permits both individual and general permits.

Wasteload allocations can be expressed in different ways, including, percent loading reductions. See 40 CFR 130.2(i) " * * * TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measures * * * ." Effluent limitations must be consistent with (but not identical to) the wasteload allocations in TMDLs. See 40 CFR 122.44(d)(1)(vii)(B). Effluent limitations for point source discharges of storm water may be narrative limitations that are expressed in terms of best management practices (BMPs). This policy is consistent with EPA's approach in its Interim Permitting Approach For Water Quality-Based Effluent Limitations in Storm Water Permits (September 1996, EPA 833-D-96-001). This interim approach allows limits to be expressed in the form of BMPs as a means of satisfying the requirement that limits derive from and comply with water quality standards and are consistent with an EPA approved or established TMDL.

The commenter correctly recognizes the difficulty in determining what defines "necessary to accommodate important economic or social development" in accordance with 40 CFR Section 131.12(a)(2). By statute, this determination involves public participation, the assurance that water quality will be protected, and several other factors. EPA would have to modify

the permit for each discharge in question in order to comply with 40 CFR Section 131.12(a)(2). Individual considerations such as these are contrary to the concept of a general permit. In addition, public participation would be impossible since the permit issuing authority would not know about the particular discharge to tier 2 waters before a NOI was submitted. Therefore, a facility operator must seek coverage under an individual permit to discharge to tier 2 waters under 40 CFR Section 131.12(a)(2)'s allowable degradation provisions to satisfy the requirements for public participation and protection of water quality. The only discharges allowed coverage under today's permit are those which do not degrade the use of a tier 2 water below its existing levels, even though those existing levels exceed levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the water.

Comment b: While the eligibility requirements disallow the discharge to cause and contribute to the impaired water, the permit doesn't require monitoring for the pollutant of concern. This presents the potential for the permit issuing authority to determine that a discharge causes or contributes at a later date than the submittal of the NOI, effectively creating a violation of the permit without the permittee being able to know of it or prevent it.

Response b: There will be situations where an NOI is accepted by the permit issuing authority and coverage provided to a facility that did not meet the eligibility requirements. Other situations include changes, such as the approval of a TMDL, which may cause a discharge to no longer be eligible. Upon learning of these types of situations, the Director may either require the permittee to submit an application for an individual NPDES permit, take an enforcement action, allow the facility to eliminate the concern, or any combination of these actions.

Comment c: The eligibility requirements require the permittees to predict the final requirements of the TMDL rule and the final loadings of TMDLs approved in the future. Part 1.2.3.8.1 shouldn't be included in the permit because it inaccurately applies 122.4(i) to general permittees.

Response c: EPA, in Sections 1.2.3.8.1 and 1.2.3.8.2, was merely conditioning a discharger's eligibility for coverage under the MSGP upon meeting certain existing conditions and requirements in EPA's NPDES regulations which apply in all applicable circumstances involving both individual and general

permits. In doing so, EPA intended to merely restate those existing conditions and requirements as eligibility requirements under the MSGP. Specifically, EPA's intention in section 1.2.3.8.1 was to condition a new discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory conditions under 40 CFR 122.4(i). A new discharger, therefore would not be eligible for coverage under the MSGP if its discharge would "cause or contribute to a violation of a water quality standard." As mentioned, this regulation is applicable to all new dischargers irrespective of the type of permit they are seeking coverage under; there is no language in this regulation that exempts new dischargers seeking coverage under a general permit. EPA, in section 1.2.3.8.1 of the MSGP, did not intend to create any confusion or change any existing interpretation of the current regulatory language referred to in that section. To avoid confusion EPA is therefore amending the language in section 1.2.3.8.1 to state that "you are not authorized to discharge if your discharge is prohibited under 40 CFR 122.4(i)."

EPA's intention in section 1.2.3.8.2 was to condition a discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory requirements under existing 40 CFR 122.44(d)(1)(vii)(B). This section of EPA's regulations requires permitting authorities to develop effluent limits in permits that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7" (EPA's existing TMDL regulations). This requirement applies to all NPDES permits both individual and general permits.

Comment d: The final permit needs to be clear that the requirements of Part 1.2.3.8.2 only apply to the pollutant of concern in the TMDL actually being discharged by the facility. This idea is in Part 1.2.3.8.1, and should be included in 1.2.3.8.2 as well. Similarly, EPA should lift the new source and new discharger restrictions if there is not a storm water component of the approved TMDL. The final permit should clarify that a facility may not have a specific allocation in an approved TMDL and as such may still be eligible for the general permit.

Response d: Section 1.2.3.8.2 of the MSGP contains the eligibility requirement that discharges be consistent with an EPA established or approved TMDL. EPA agrees with the commenter's suggestion that Section

1.2.3.8.2 should clearly state that such requirement is only applicable to facilities discharging the pollutant for which the TMDL is established. EPA is therefore, adding this language to Section 1.2.3.8.2.

Comment e: The eligibility requirements in Part 1.2.3.9 defeat the concept of efficiency of a general permit and should be removed. EPA does not have the authority to require the applicant to assess if they support the use classification of the receiving water because it increases the cost of applying for general permit coverage which has not been evaluated by EPA under the Unfunded Mandates Reform Act. Furthermore, the duty to determine whether or not a discharge supports the use classification of a receiving water is the permit issuing authority's responsibility.

Response e: The concept of the general permit is to reduce the administrative burden on EPA and the regulated community by issuing one permit for many facilities that would otherwise all have exactly the same conditions in their individual permits. If a facility is not like other ones where it would have different permit conditions it should not apply for the general permit in question. This general permit only applies to facilities that support the use classification of the receiving waters. If they do not, EPA is not obligated to change the general permit to include them. The applicant must seek alternate permit coverage. It is the permit issuing authority's responsibility to ensure that the conditions of the general permit support use classifications. It is not their responsibility to ensure that each individual discharge authorized by the permit supports the use. The eligibility requirements are there to indicate the type of facility that can be covered under the permit. The efficiency intended by a general permit is to reduce the number of individual permits and to make application for NPDES permit easier for those who qualify for the coverage under the general permit.

Comment f: The final permit needs to be clear that a facility may not have a specific allocation in an approved TMDL and as such may still be eligible for the general permit.

Response f: EPA agrees in part with the commenter that there may be circumstances under which it is not necessary that all dischargers receive individual wasteload allocations. EPA's regulations at 40 CFR 130.2 define a wasteload allocation as the portion of the receiving water's loading capacity that is allocated to one of its existing or

future point sources of pollution. EPA has interpreted this regulation to mean that each point source must be given an individual wasteload allocation when it is feasible to calculate such a wasteload allocation. EPA believes that states may find it infeasible to calculate individual wasteload allocations for all point sources covered by a specific general permit. In that case, the TMDL would establish individual wasteload allocations for dischargers subject to individual permits, whereas dischargers subject to a general permit would be accounted for in the aggregate under a single wasteload allocation specific to the general permit under which they are authorized to discharge.

Comment g: Lift the new source/new discharger restriction if there is not a storm water component of the approved TMDL.

Response g: EPA, in Sections 1.2.3.8.1 and 1.2.3.8.2, was merely conditioning a discharger's eligibility for coverage under the MSGP upon meeting certain existing conditions and requirements in EPA's NPDES regulations which apply in all applicable circumstances involving both individual and general permits. In doing so, EPA intended to merely restate those existing conditions and requirements as eligibility requirements under the MSGP. Specifically, EPA's intention in section 1.2.3.8.1 was to condition a new discharger's eligibility for coverage under the MSGP upon meeting the existing regulatory conditions under 40 CFR 122.4(i). A new discharger, therefore would not be eligible for coverage under the MSGP if its discharge would "cause or contribute to a violation of a water quality standard." As mentioned, this regulation is applicable to all new dischargers irrespective of the type of permit they are seeking coverage under; there is no language in this regulation that exempts new dischargers seeking coverage under a general permit. EPA, in section 1.2.3.8.1 of the MSGP, did not intend to create any confusion or change any existing interpretation of the current regulatory language referred to in that section. To avoid confusion EPA is therefore amending the language in section 1.2.3.8.1 to state that "you are not authorized to discharge if your discharge is prohibited under 40 CFR 122.4(i)."

Section V.E Discharges Not Previously Covered by an Individual Permit

Comment: One commenter requested clarification of the permit requirement at Part 1.2.3.3.2.3 to include any specific storm water BMPs from the old individual permit in the Storm Water

Pollution Prevention Plan when transferring from an individual permit to the MSGP. The commenter interpreted this condition to mean that only those specific storm water BMPs from the old individual permit (and areas associated with outfalls from the old permit) needed to be included in the Plan, and noted an apparent inconsistency on page 17021, Item F, of the preamble which states that the Plan must address the entire facility.

Response: When transferring from an individual permit to the MSGP, the requirement at Part 1.2.3.3.2.3 to include any specific storm water BMPs from the old individual permit in the Storm Water Pollution Prevention Plan is in addition to and not in lieu of the basic requirements in Part 4. However, the BMPs brought over from the old individual permit may satisfy one or more of the "basic" Storm Water Pollution Prevention Plan requirements under Part 4 and/or the sector-specific requirements under Part 6. There could be areas at a facility (e.g., employee parking lots) that do not need to be addressed under the permit (and SWPPP) unless the runoff from such areas commingles with storm water associated with industrial activity (or was previously permitted).

Section VI.A Notification Requirements

Comment a: The commenter supported the use of electronic filing of NOIs, but expressed concern that facilities without Internet access would be at a disadvantage.

Response a: It is not the intention of EPA to only accept electronic submittals. Electronic submittal is another alternative which, hopefully, will be available to the regulated community in the near future.

Comment b: The commenter does not support any changes to the NOI form, and expects any changes to comply with the Paperwork Reduction Act.

Response b: Any changes to the NOI form that result in an increase in burden for the applicant must first be reviewed and approved by the Office of Management and Budget. Part of this review includes compliance with the requirements of the Paperwork Reduction Act. Changes to the NOI form published in today's permit were limited to those that provide clarification in information, as well as those changes that reflect changes in the storm water permits issued by EPA. EPA has determined that these changes do not represent an increase in burden for completing the NOI form. As noted in Section 2.2, the more extensive changes listed in the March 30, 2000 proposal

need to complete their OMB review before they can be included in the NOI form.

Comment c: A commenter supported inclusion of the no exposure certification form as an addendum to the MSGP-2000.

Response c: EPA agrees that providing the form with the permit is a convenience for facilities qualifying for the no exposure exemption. The certification form is an addendum to the permit.

Section VI.B Special Conditions

Comment a: The Agency is shifting its responsibility regarding meeting minimum technology standards in NPDES permits to the discharger.

Response a: EPA expects that when a facility submits an NOI they are familiar with both the permit and their facility. They should be able to determine their eligibility. The permitting authority may concur with the facility's assessment, or not. EPA does not believe that it has shifted its responsibility on this matter.

Comment b: There was a request to clarify the requirements in the MSGP-2000 regarding co-located facilities.

Response b: A facility is considered co-located if there is a second industrial activity occurring which meets the definition of storm water discharge associated with industrial activity. For example, a facility operates an auto salvage yard and also has an area onsite for scrap recycling. The facility as a whole would meet the requirements for Sector M—Auto salvage. The area where scrap recycling occurs would meet the requirements for Sector N—Scrap Recycling. Any storm water discharges from the scrap recycling area needs to meet the requirements for both sectors. The second activity may or may not be related to the primary industrial activity. The determination as to whether something is co-located rests in the definition of storm water discharges associated with industrial activity. If a second activity exists at a facility which meets one of the categories in the definition, then the facility has co-located industrial activities.

Section VI.C Common Pollution Prevention Plan Requirements

Comment a: A commenter expressed concern about various interpretations and implementation of the storm water program, including incorporation of effluent limits, and stressed " * * * It is imperative that the Agency maintains that SWPPP requirements be interpreted and implemented in a practicable and economically feasible manner."

Response a: EPA believes that proper implementation of storm water BMPS

will achieve compliance with water quality standards. EPA is responsible for implementation of the storm water program in eight states, various territories, including Puerto Rico and District of Columbia; and various Indian Country lands throughout the country. For the remaining 42 states, the state agency is responsible for program implementation. They have the authority to interpret and implement the program as appropriate for their state. It continues to be EPA's policy not to include effluent limitations in storm water permits. However, a state may choose to follow a different policy than EPA's.

Comment b: There is not a specific mention of catch basin inserts or fillers on the listing of BMPs.

Response b: In discussions concerning BMPs, EPA attempted to provide some examples of various types of BMPs. By no means is the listing intended to be all inclusive. EPA acknowledges that there are other BMPs, such as catch basin inserts or fillers, that were not mentioned in discussions but may be appropriate in various circumstances.

Section VI.E Monitoring and Reporting Requirements

Comment a: Monitoring results are an unreliable indicator of a discharge problem and they do not provide confirmation of a problem. Permittees cannot use results to support facility management.

Response a: EPA believes that since analytic monitoring has been performed by substantial numbers of permittees only during the fourth year of the 1995 MSGP (many facilities complying with monitoring requirements in the fourth year were covered under the earlier baseline general permit during the second monitoring year and, consequently, had no equivalent monitoring requirement), it is premature to make any final conclusions regarding the value of the Agency's acquisition of the monitoring data or to consider dropping the monitoring. In essence, the fourth-year monitoring data set EPA received represents the baseline of pollutant discharge information under the sector-specific industrial general storm water permit. Several rounds of monitoring significantly enhances the utility of the results for evaluating the effectiveness of management practices at the site as well as for the industry sector as a whole. EPA commits to using data from the 1995 and 2000 permits to evaluate the effectiveness of management practices on an industry sector basis and to evaluate the need for changes in monitoring protocols for the next permit.

EPA acknowledges that, considering the small number of samples required per monitoring year (four), and the vagaries of storm water discharges, it may be difficult to determine or confirm the existence of a discharge problem as a commenter claimed. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job. EPA believes there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness.

Comment b: Monitoring results are not necessarily an indicator of BMP effectiveness and EPA never justified that they are.

Response b: While not practicable for EPA to require an increase in monitoring, operators are encouraged to sample more frequently to improve the statistical validity of their results. Unless the proper data acquisition protocol for making a valid BMP effectiveness determination is rigorously followed, any other method used to assess BMP effectiveness would be qualitative, and therefore less reliable. The least subjective approach, and most beneficial to operators and stakeholders, EPA believes, remains a combination of visual and analytic monitoring, using analyte benchmark levels to target potential problems. Statistical uncertainties inherent in the monitoring results will necessitate both operators and EPA exercising best professional judgment in interpreting the results. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job.

Comment c: Alternate test methods can be used for determining effectiveness of BMPs at a facility, and benchmarks will need modifying to account for variability in test methods.

Response c: A technically valid, deterministic investigation of BMP effectiveness would necessarily involve collecting discharge pollutant load data before and after the BMP. The constraints inherent in monitoring preclude requiring this kind of investigation. All other methods used to make an assessment of SWPPP/BMP effectiveness are qualitative. The least subjective approach, and most

beneficial to operators and stakeholders, EPA believes, is a combination of visual and analytic monitoring, using analyte benchmark levels (or "targets") as an indicator of potential problems. Vagaries of storm discharges and statistical concerns will necessitate operators and EPA exercising best professional judgment in interpreting the results of any monitoring. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job.

Comment d: (a) The presumption of an impact on water quality standards by storm water is inappropriate given the episodic nature of storms. (b) EPA recognizes that during a storm, water quality standards will not always be met, so EPA shouldn't rely on water quality standards at a discharge point to determine if a facility is in compliance. (c) Monitoring has marginal value in assessing and protecting water quality.

Response d: (a) It is true that many impacts of storm water are short-term and that many pollutants are not really toxic or bioaccumulative. A short term water quality standard violation is not necessarily going to persist long enough to be toxic. (b) In the absence of establishing discharge pollutant loads that correlate directly to a receiving water, as would be done for an individual permit, EPA settled on benchmark levels which would, under nearly all scenarios, be protective of water quality standards. Recognizing the shortcomings of these generic pollutant levels, EPA only intends for them to be used as indicators of possible problems and as a flag to reevaluate the SWPPP—not as a trigger to begin mandatory SWPPP or operational revisions unless, after employing BPJ, the operator deems such revisions are necessary. (c) While end-of-pipe/end-of-property analytic monitoring for storm water may not reflect potential impacts to water quality, EPA does not intend to use the data for that purpose.

Comment e: EPA needs to reevaluate the validity of benchmark values.

Response e: Universal benchmark levels cannot be established; the next best thing would be storm water pollutant loadings vis-a-vis water segment-specific TMDLs. But when used as a target or indicator, without requiring specific corrective actions beyond using BPJ to reassess present conditions and make any changes deemed necessary, the present

benchmarks are adequate. In specific situations operators may reasonably conclude, after analyzing monitoring results above benchmarks, their present SWPPPs/BMPs are adequately protective of water quality, or that other conditions such as discharging to low-quality, ephemeral streams may obviate the need for SWPPP/BMP revisions.

Comment f: Monitoring diverts resources from more effective implementation of SWPPPs. EPA should focus on pollution prevention, instead.

Response f: In developing the monitoring requirements, *i.e.*, pollutants of concern, monitoring waivers, etc., along with providing sampling and monitoring guidances, EPA endeavored to make the financial burden as minimal as possible. Four quarterly samples is a minimal data set for evaluating the effectiveness of SWPPPs. Those least able to afford expansive monitoring programs, *i.e.*, small businesses, likely have few outfalls to begin with. EPA believes that if monitoring is required at a facility, it should be planned for and budgeted as a cost of doing business.

Comment g: Permittees fear benchmark limits would be viewed as effluent limitations.

Response g: EPA agrees that benchmark limits are not effluent limitations and should not be used, in and of themselves, as the basis for issuing an enforcement violation.

Comment h: Storm water discharge variability can be caused by atmospheric/dry deposition, run on and fate in transport; facilities with structural leachate are at a disadvantage *vis-a-vis* those without the problem.

Response h: EPA acknowledges the potential for adding pollutants to a facility's discharges from external or structural sources. A permittee is, nonetheless, still legally responsible for the quality of all discharges from his/her site—but not from pollutants that may be introduced outside the boundaries of his/her property or the areas where his/hers structures, industrial activities or materials are located. Anything that increases the pollutant load in the runoff prior to leaving the site, whether originating from air deposition, run-on from nearby sites, or leachate from on-site structures, remains the responsibility of the permittee. This was affirmed in the ruling by the Environmental Appeals Board against the General Motors Corp. CPC-Pontiac Fiero Plant in December 1997.

Comment i: Allow pollutant credits for background sources of pollution.

Response i: Pollutant credits for background sources of pollution is unfeasible for storm water. Either EPA or the permittee would have to

determine the pollutant loads of both the run-on and runoff to calculate pollutant credits. Resources are insufficient to implement this practice.

Comment j: Differences in monitoring results may result from changes in business conditions; changes in personnel doing monitoring can make observations/discharge examinations unreliable.

Response j: EPA published guidance on both monitoring and sampling procedures (available from EPA's Office of Water Resource Center) to standardize data collection practices.

Comment k: The same person cannot always do monitoring. Having to rely on different people is bad for consistency in recording observations and making discharge examinations.

Response k: EPA requires that personnel implementing the SWPPP be provided training as an element of the SWPPP. This training must cover program elements to ensure the quality and validity of all information collected.

Comment l: Sampling can be dangerous.

Response l: EPA provides waivers and options such that extreme weather or perilous conditions are accounted for.

Comment m: Determining whether a storm qualifies to be monitored is difficult.

Response m: EPA has always defined what constitutes a storm event worthy of monitoring. Modern weather forecasting is making it easier to anticipate and plan for qualifying storms.

Comment n: Monitoring in remote west or arid/semi-arid areas is difficult and burdensome.

Response n: EPA has always had accommodations and waivers for lack of qualifying storm events. See EPA Response o below.

Comment o: EPA should reduce analytic monitoring and visual monitoring based on average rainfall (similar to Phase II regulations).

Response o: EPA already allows permittees to skip monitoring in any quarter in which no qualifying storm events occur.

Comment p: Some discharges (in the west) occur only infrequently and sometimes only to isolated, ephemeral streams (which may have no indigenous biota).

Response p: Ephemeral streams may still eventually flow into permanent waters of the U.S.; hence, protective measures may still be needed to protect water quality. If there are truly no water quality standards established for an ephemeral stream and the outflow does not feed another water body, then it's likely there would not be a "point

source discharge" and no permit would be required. Only those point source discharges to waters of the U.S. need to be included in a SWPPP.

Comment q: Continuation of monitoring is not justified, especially for mining sectors.

Response q: EPA believes that since analytic monitoring has been performed by substantial numbers of permittees only during the fourth year of the 1995 MSGP (many facilities complying with monitoring requirements in the fourth year were covered under the earlier baseline general permit during the second monitoring year and, consequently, had no equivalent monitoring requirement), it is premature to make any final conclusions regarding the value of the Agency's acquisition of the monitoring data or to consider dropping the monitoring. In essence, the fourth-year monitoring data set EPA received represents the baseline of pollutant discharge information under the sector-specific industrial general storm water permit. Several rounds of monitoring significantly enhance the utility of the results for evaluating the effectiveness of management practices at the site as well as for the industry sector as a whole. EPA commits to using data from the 1995 and 2000 permits to evaluate the effectiveness of management practices on an industry sector basis and to evaluate the need for changes in monitoring protocols for the next permit.

EPA acknowledges that, considering the small number of samples required per monitoring year (four), and the vagaries of storm water discharges, it may be difficult to determine or confirm the existence of a discharge problem as a commenter claimed. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job. EPA believes there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness.

Comment r: EPA has not provided guidance on monitoring snow melt events.

Response r: EPA does not have any specific guidance on this matter at the present time. Guidance may be developed in the future. In the interim, however, EPA believes that facilities should be able to obtain reasonably representative samples using their best judgment. Two important points must be considered to ensure the snow melt

sample is representative: (1) The melted runoff must come in contact with any pollutants of concern present and not be overly "contaminated" with concentrated surficial deposits of hydrocarbons, dirt, salt, etc., and (2) the melted runoff must have characteristics that approximate those of a monitor-qualifying rain storm (0.1 inch runoff volume, sampled within the first 1/2 up to 1 hour).

Comment s: (a) In addition to monitoring results, EPA should also require submission of a description of storm water controls being implemented. (b) EPA should require facilities to monitor for pollutants similar to what would be done under an individual permit (to ensure BMPs are being implemented). (c) Monitoring will aid the permittee, permitting authority and the public in understanding the sources and toxicity of storm water at a site.

Response s: (a) EPA already requires that all BMPs and other controls be described in the SWPPP, including inspections, maintenance, etc. Any BMP changes or additions must be added to an updated SWPPP, so EPA will not require this information be formally submitted. If EPA needs to inspect a facility or determine an enforcement issue, the facility's SWPPP will be reviewed for BMP information. (b) Customizing a facility's monitoring requirements is tantamount to writing an individual permit for the facility, which would require the same application package as for an individual permit. This is an option for those facilities where discharges or receiving waters are a concern but, otherwise, EPA believes the requirements of the present general permit with the identified pollutants of concern is sufficient for a large majority of facilities. (c) EPA agrees that monitoring can be used as an indicator of potential problems or toxicity concerns.

Comment t: Submit Discharge Monitoring Reports (DMRs) along with NOIs to prove compliance. If no DMRs were submitted under the current MSGP, require quarterly monitoring for all five years of MSGP-2000.

Response t: DMR and NOI submission deadlines have not coincided in the past and, from a regulatory perspective, it is not feasible to link them. Past instances of non-compliance are an enforcement issue with established penalties in the CFRs, but these instances do not automatically preclude future permit coverage nor can EPA include separate "penalties" such as 5-year monitoring in the permit for them.

Comment u: Analytic monitoring may be good for general info, which may be

of use to the facility and regulatory agency, but it should not be required under the permit. Only visual monitoring should be required. One commenter indicated that analytic monitoring may be good for watershed-wide indications of general trends.

Response u: EPA believes that since analytic monitoring has been performed by substantial numbers of permittees only during the fourth year of the 1995 MSGP (many facilities complying with monitoring requirements in the fourth year were covered under the earlier baseline general permit during the second monitoring year and, consequently, had no equivalent monitoring requirement), it is premature to make any final conclusions regarding the value of the Agency's acquisition of the monitoring data or to consider dropping the monitoring. In essence, the fourth-year monitoring data set EPA received represents the baseline of pollutant discharge information under the sector-specific industrial general storm water permit. Several rounds of monitoring significantly enhance the utility of the results for evaluating the effectiveness of management practices at the site as well as for the industry sector as a whole. EPA commits to using data from the 1995 and 2000 permits to evaluate the effectiveness of management practices on an industry sector basis and to evaluate the need for changes in monitoring protocols for the next permit.

EPA acknowledges that, considering the small number of samples required per monitoring year (four), and the vagaries of storm water discharges, it may be difficult to determine or confirm the existence of a discharge problem. When viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator that his SWPPP needs to be reevaluated and that pollutant loads may need to be reduced. Conversely, analytic levels below or near benchmarks can confirm to the operator that his SWPPP is doing its intended job. EPA believes there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness. A technically valid, deterministic investigation of BMP effectiveness would necessarily involve collecting discharge pollutant load data before and after the BMP. The constraints inherent in monitoring preclude requiring this kind of investigation. All other methods used to make an assessment of SWPPP/BMP effectiveness are qualitative. Quarterly visual monitoring of storm water discharges has always been a permit requirement, for many of the same reasons why commenters favor it,

and will continue to be so. The least subjective approach, and most beneficial to operators and stakeholders, EPA believes, is a combination of visual and analytic monitoring, using analyte benchmark levels (or "targets") as an indicator of potential problems. Variability of storm discharges and statistical concerns will necessitate operators and EPA exercising best professional judgement in interpreting the results of any monitoring.

Monitoring in impaired water bodies would focus attention on the problem water bodies and possible pollutant sources. However, not all impaired water bodies and their impairments have been determined. The goal of EPA's storm water program is also to protect and maintain water quality, not just remediate impaired waters, so focusing on impaired waters only does not fulfill all the program's responsibilities.

Comment v: If monitoring results are below the benchmark, facilities should not be required to monitor unless there are major changes to the facility.

Response v: Several rounds of monitoring significantly enhances the utility of the results for evaluating the effectiveness of management practices at the site as well as for the industry sector as a whole. EPA is keeping the monitoring requirement for all specified sectors at least one more time to provide stakeholders with continued assurance that SWPPPs are being implemented, concerted efforts to protect water quality are ongoing, and a mechanism is in place to indicate potential problems. The previous second year monitoring waiver for facilities with pollutant levels below the benchmark level is being retained.

Comment w: Substantially identical outfalls reduces burden and is beneficial to SWPPP implementation.

Response w: Noted.

Visual Monitoring

Comment x: Numerous commenters supported dropping analytic monitoring from the MSGP-2000 in favor of just requiring quarterly visual monitoring. Commenters claimed visual monitoring is adequate to ensure compliance and environmental protection (especially coupled with training), and is least burdensome.

Response x: Quarterly visual monitoring of storm water discharges has always been a permit requirement, for many of the same reasons why commenters favor it, and will continue to be so. EPA will also be retaining analytic monitoring because we believe the best way to ensure SWPPP effectiveness and protection of water

quality is through a combination of visual and analytic monitoring. The reasons for not adopting visual monitoring only are explained further in the rationale for justifying quarterly analytic monitoring.

Comment y: Operators need flexibility to collect representative samples for visual monitoring.

Response y: EPA believes the same representative sample reduction provided for analytic monitoring is inappropriate for the quarterly visual monitoring. A visual examination of all discharges is the least that operators can do to ensure all discharges are clean and would provide greater confirmation to themselves and other stakeholders that the representative discharge sample reduction claimed for analytic monitoring is, in fact, justified.

Comment z: Support visual monitoring with use of field test kits, which are cheaper and easier than 40 CFR 136.

Response z: Field test kits have not yet been confirmed as being as reliable as currently required analytical methods. Therefore, EPA is not allowing the use of kits in place of currently required analytical methods at this time.

Comment aa: Make visual evaluations standard.

Response aa: EPA has standard protocols for storm water sampling (the storm water sampling guidance can be obtained from EPA's Office of Water Resource Center at 202-260-7786) and the permit describes the examination procedures, parameters to be examined, meaning of results, etc.

Comment bb: Visual monitoring should be reduced commensurately in arid climates.

Response bb: EPA already allows permittees to document in their monitoring records that no discharge occurred during a monitoring quarter.

Annual Reporting

Comment cc: One option suggested by commenters was for an annual report, possibly using a standardized form, to be submitted to EPA detailing the permittee's SWPPP highlights and revisions/additions, inspections, compliance evaluations, visual monitoring results, etc. One comment against this option stated that the volume of data submitted would be too great for the Agency to evaluate. Other opponents to this option indicated that the reports would not contain enough information to evaluate SWPPP effectiveness, ensure water quality protection, or provide the information necessary to make long-term management plans. Commenters in support of the annual report concept

held that it would provide a record of the permittee's commitment to storm water control, was better for evaluating SWPPP effectiveness, and would provide information to EPA to determine if sampling or a site inspection is needed.

Response cc: Information on SWPPP highlights and revisions/additions, inspections, compliance evaluations, visual monitoring results, etc. is already required to be documented in a facility's SWPPP, which, if deemed necessary, must be provided to EPA on demand. If no monitoring data were available, an annual report could be used to ensure that a facility is implementing its SWPPP. The reports could also be used to prioritize sites for inspection. However, EPA agrees that it would be very burdensome to review all the reports and very difficult to assess the effectiveness of a facility's SWPPP based on that review alone. The subjectivity inherent in annual reporting makes it an undesirable substitute for analytic monitoring. Documenting the kind of information in the annual report is already a SWPPP requirement and is, therefore, available to operators for assessing and improving their storm water programs. For these reasons, EPA will not require reports containing essentially the same information required in SWPPPs to be submitted in lieu of analytic monitoring.

Group Monitoring

Comment dd: Commenters also suggested group monitoring. In this option a consortium of like permittees would do sampling at one facility, possibly on a rotating basis. The sample results would represent all the facilities in the consortium. A variation of group monitoring is for the consortium to retain a consultant to do representative sampling and provide storm water program guidance and evaluations. Supporters of this concept said it may allow for comparisons of effectiveness of different SWPPP practices (e.g., sweeping vs. catchment basin for solids control). One commenter pointed out that the feasibility of the group concept is suspect due to the fact that individual facilities may have different topography, soil and other natural conditions.

Response dd: EPA believes that technically valid BMP comparisons could be done under this type of program. However, it would be difficult and very resource-intensive for EPA to establish criteria for group eligibility and then monitor to ensure that groups met these criteria.

Watershed Monitoring

Comment ee: Commenters suggested conducting watershed monitoring rather than monitoring at the facility. This option involves replacing the monitoring of discrete storm water discharges with ambient receiving water monitoring on a watershed basis.

Response ee: Watershed monitoring is invaluable to making real conclusions regarding storm water impacts of water quality, and will be employed in making total maximum daily load (TMDL) determinations. However, watershed monitoring cannot replace facility-specific storm water discharge monitoring to determine the loads contributed by the facilities and to evaluate the effectiveness of the SWPPP.

Monitoring Only in Impaired Waters

Comment ff: Several commenters supported requiring monitoring only in impaired water bodies and for pollutants that cause the impairment.

Response ff: Although this option would focus attention on the problem water bodies and possible pollutant sources, EPA and a commenter point out that not all impaired water bodies and their impairments have been determined. The goal of EPA's storm water program is also to protect and maintain water quality, not just remediate impaired waters, so focusing on impaired waters only does not fulfill all the program's responsibilities.

Section VII Cost Estimates for Common Permit Requirements

Comment: EPA incorrectly estimated costs associated with the original MSGP. The new permit imposes even more costs. EPA must better estimate these costs, especially for small businesses. EPA should conduct a Regulatory Flexibility Analysis as well as perform a Small Business Regulatory Enforcement Fairness Act (SBREFA) consultation.

Response: The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) generally requires an agency to prepare a regulatory flexibility analysis for any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute. Under section 605(b) of the RFA, however, if the head of an agency certifies that a rule will not have a significant economic impact on a substantial number of small entities, the statute does not require the agency to prepare a regulatory flexibility analysis.

The MSGP-2000 provides facilities the option of obtaining a general permit

rather than applying for individual permits; it does not extend coverage of the existing NPDES regulations. Therefore, the costs associated with obtaining a permit were already addressed when the NPDES regulations were issued. Furthermore, the MSGP-2000 is intended to reduce costs by providing a streamlined procedure for obtaining permit coverage. For these reasons, there was no requirement on EPA to conduct a separate analysis to support the MSGP-2000.

X. Economic Impact (Executive Order 12866)

Under Executive Order 12866 [58 FR 51735 (October 4, 1993)], the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

EPA has determined that the reissued MSGP is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to formal OMB review prior to proposal.

XI. Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act (UMRA), Public Law 104-4, generally requires Federal agencies to assess the effects of their "regulatory actions" on State, local, and tribal governments and the private sector. UMRA uses the term "regulatory actions" to refer to regulations. (See, e.g., UMRA section 201, "Each agency shall * * * assess the effects of Federal regulatory actions * * * (other than to the extent that such regulations incorporate requirements specifically set forth in law)" (emphasis added)). UMRA section 102 defines "regulation" by reference to 2 U.S.C. 658 which in turn defines "regulation" and "rule" by reference to section 601(2) of the Regulatory Flexibility Act (RFA). That

section of the RFA defines "rule" as "any rule for which the agency publishes a notice of proposed rulemaking pursuant to section 553(b) of [the Administrative Procedure Act (APA)], or any other law * * *"

As discussed in the RFA section of this notice, NPDES general permits are not "rules" under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits are also not subject to such a requirement under the CWA. While EPA publishes a notice to solicit public comment on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide "an opportunity for a hearing." Thus, NPDES general permits are not "rules" for RFA or UMRA purposes.

EPA has determined that today's MSGP reissuance does not result in expenditures of \$100 million or more for State, local and Tribal governments, in the aggregate, or the private sector in any one year.

The Agency also believes that the final MSGP will not significantly nor uniquely affect small governments. For UMRA purposes, "small governments" is defined by reference to the definition of "small governmental jurisdiction" under the RFA. (See UMRA section 102(1), referencing 2 U.S.C. 658, which references section 601(5) of the RFA.) "Small governmental jurisdiction" means governments of cities, counties, towns, etc., with a population of less than 50,000, unless the agency establishes an alternative definition.

Today's final MSGP also will not uniquely affect small governments because compliance with the final permit conditions affects small governments in the same manner as any other entities seeking coverage under the final permit.

XII. Paperwork Reduction Act

EPA has reviewed the requirements imposed on regulated facilities resulting from the final MSGP under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* The information collection requirements of the MSGP have already been approved in previous submissions made for the NPDES permit program under the provisions of the CWA.

XIII. Regulatory Flexibility Act

The Agency has determined that the final MSGP being published today is not subject to the Regulatory Flexibility Act ("RFA"), which generally requires an agency to conduct a regulatory flexibility analysis of any significant impact the rule will have on a

substantial number of small entities. By its terms, the RFA only applies to rules subject to notice-and-comment rulemaking requirements under the Administrative Procedure Act ("APA") or any other statute. Today's final MSGP is not subject to notice and comment requirements under the APA or any other statute because the APA defines "rules" in a manner that excludes permits. See APA section 551(4), (6), and (8).

APA section 553 does not require public notice and opportunity for comment for interpretative rules or general statements of policy. In addition to finalizing the new MSGP, today's notice repeats for the convenience of the reader an interpretation of existing regulations promulgated almost twenty years ago. The action would impose no new or additional requirements.

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*), operators of discharges associated with industrial activities that submit a complete Notice of Intent in accordance with Part 2.2 for a discharge that is located in an area specified in Part 1.1 and eligible for permit coverage under Part 1.2 are authorized to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth herein.

This permit becomes effective on October 30, 2000.

This permit and the authorization to discharge expire at midnight, October 30, 2005.

Signed and issued this 15th day of September, 2000.

Linda M. Murphy,

Director, Office of Ecosystem Protection, Region 1.

Signed and issued this 15th day of September, 2000.

Kathleen C. Callahan,

Director, Division of Environmental Planning and Protection, Region 2.

Signed and issued this 15th day of September, 2000.

Joseph T. Piotrowski,

Acting Director, Water Protection Division, Region 3.

Signed and issued this 12th day of September, 2000.

Douglas Mundrick,

Acting Deputy Division Director, Water Management Division, Region 4.

Signed and issued this 27th day of September, 2000.

Sam Becker,

Acting Director, Water Quality Protection Division, Region 6.

Signed and issued this 2d day of October, 2000.

Stephen S. Tuber,

Acting Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance, Region 8.

Signed and issued this 28th day of September, 2000.

Alexis Strauss,

Director, Water Division, Region 9.

Signed and issued this 14th day of September, 2000.

Michael A. Bussell,

Deputy Director, Office of Water, Region 10.

NPDES Multi-Sector General Permits for Storm Water Discharges Associated With Industrial Activities

Table of Contents

1. Coverage Under This Permit

- 1.1 Permit Area
- 1.2 Eligibility
- 1.3 How to Obtain Authorization Under This Permit
- 1.4 Terminating Coverage
- 1.5 Conditional Exclusion for No Exposure

2. Notice of Intent Requirements

- 2.1 Notice of Intent (NOI) Deadlines
- 2.2 Contents of Notice of Intent (NOI)
- 2.3 Use of NOI Form
- 2.4 Where to Submit
- 2.5 Additional Notification

3. Special Conditions

- 3.1 Hazardous Substances or Oil
- 3.2 Additional Requirements for Salt Storage
- 3.3 Discharge Compliance With Water Quality Standards

4. Storm Water Pollution Prevention Plans

- 4.1 Storm Water Pollution Prevention Plan Requirements
- 4.2 Contents of Plan
- 4.3 Maintenance
- 4.4 Non-Storm Water Discharges

4.5 Documentation of Permit Eligibility

Related to Endangered Species

4.6 Documentation of Permit Eligibility

Related to Historic Places

4.7 Copy of Permit Requirements

4.8 Applicable State, Tribal or Local Plans

4.9 Comprehensive Site Compliance Evaluation

4.10 Maintaining Updated SWPPP

4.11 Signature, Plan Review and Making Plans Available

4.12 Additional Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Reporting Requirements

5. Monitoring Requirements and Numeric Limitations

5.1 Types of Monitoring Requirements and Limitations

5.2 Monitoring Instructions

5.3 General Monitoring Waivers

5.4 Monitoring Required by the Director

5.5 Reporting Monitoring Results

6. Sector-Specific Requirements for Industrial Activity

6.A Sector A—Timber Products

6.B Sector B—Paper and Allied Products Manufacturing

6.C Sector C—Chemical and Allied Products Manufacturing

6.D Sector D—Asphalt Paving and Roofing Materials and Lubricant Manufacturers

6.E Sector D—Glass, Clay, Cement, Concrete, and Gypsum Products

6.F Sector F—Primary Metals

6.G Sector G—Metal Mining (Ore Mining and Dressing)

6.H Sector H—Coal Mines and Coal Mining Related Facilities

6.I Sector I—Oil and Gas Extraction and Refining

6.J Sector J—Mineral Mining and Dressing

6.K Sector K—Hazardous Waste Treatment, Storage or Disposal Facilities

6.L Sector L—Landfills, Land Application Sites and Open Dumps

6.M Sector M—Automobile Salvage Yards

6.N Sector N—Scrap Recycling and Waste Recycling Facilities

6.O Sector O—Steam Electric Generating Facilities

6.P Sector P—Land Transportation and Warehousing

6.Q Sector Q—Water Transportation

6.R Sector R—Ship and Boat Building or Repair Yards

6.S Sector S—Air Transportation

6.T Sector T—Treatment Works

6.U Sector U—Food and Kindred Products

6.V Sector V—Textile Mills, Apparel and Other Fabric Products

6.W Sector W—Furniture and Fixtures

6.X Sector X—Printing and Publishing

6.Y Sector Y—Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries

6.Z Sector Z—Leather Tanning and Finishing

6.AA Sector AA—Fabricated Metal Products

6.AB Sector AB—Transportation Equipment, Industrial or Commercial Machinery

6.AC Sector AC—Electronic, Electrical Equipment and Components, Photographic and Optical Goods

6.AD Storm Water Discharges Designated By the Director As Requiring Permits

7. Reporting

7.1 Reporting Results of Monitoring

7.2 Additional Reporting for Dischargers to a Large or Medium Municipal Separate Storm Sewer System

7.3 Miscellaneous Reports

8. Retention of Records

8.1 Documents

8.2 Accessibility

8.3 Addresses

8.4 State, Tribal, and Other Agencies

9. Standard Permit Conditions

9.1 Duty to Comply

9.2 Continuation of the Expired General Permit

9.3 Need to Halt or Reduce Activity Not a Defense

9.4 Duty to Mitigate

9.5 Duty to Provide Information

9.6 Other Information

9.7 Signatory Requirements

9.8 Penalties for Falsification of Reports

9.9 Oil and Hazardous Substance Liability

9.10 Property Rights

9.11 Severability

9.12 Requiring Coverage Under an Individual Permit or an Alternative General Permit

9.13 State/Tribal Environmental Laws

9.14 Proper Operation and Maintenance

9.15 Inspection and Entry

9.16 Monitoring and Records

9.17 Permit Actions

10. Reopener Clause

10.1 Water Quality Protection

10.2 Procedures for Modification or Revocation

11. Transfer or Termination of Coverage

11.1 Transfer of Permit Coverage

11.2 Notice of Termination (NOT)

11.3 Addresses

11.4 Facilities Eligible for "No Exposure" Exemption for Storm Water Permitting

12. Definitions

13. Permit Conditions Applicable to Specific State, Indian Country Lands, or Territories

Addendum A—Endangered Species Guidance

Addendum B—Historic Properties Guidance

Addendum C—New Source Environmental Assessments

Addendum D—Notice of Intent Form

Addendum E—Notice of Termination Form

Addendum F—No Exposure Certification Form

Note: In the Spirit of the Agency's "Readable Regulations" policy, this permit was written as much as practicable in a more reader-friendly, plain language format that should make it easier for people less familiar with traditional EPA permits and regulations to read and understand the permit requirements. Terms like "you" and "your" are used to refer to the party(ies) that are operators of a discharge, applicants, permittees, etc. Terms like "must" are used

instead of "shall." Phrasing such as "If you. * * *" is used to identify conditions that may not apply to all permittees.

Permit coverage is actually provided by legally separate and distinctly numbered permits, all of which are contained herein, and which cover each of the areas listed in Parts 1.1.1 through 1.1.10.

in an area of coverage below, please contact the appropriate State NPDES permitting authority to obtain a permit.

1. Coverage Under This Permit

1.1 Permit Area

The permit language is structured as if it were a single permit, with State, Indian country land or other area-specific conditions contained in Part 13.

Note: EPA can only provide permit coverage for areas and classes of discharges not within the scope of a State's NPDES authorization. For discharges not described

1.1.1 EPA Region 1: CT, MA, ME, NH, RI, VT

The states of Connecticut, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of coverage/where EPA is permitting authority
CTR05*##I	Indian country lands within the State of Connecticut.
MAR05*###	Commonwealth of Massachusetts, except Indian country lands.
MAR05*##I	Indian country lands within the Commonwealth of Massachusetts.
MER05*###	State of Maine, except Indian country lands.
MER05*##I	Indian country lands within the State of Maine.
NHR05*###	State of New Hampshire.
RIR05*##I	Indian country lands within the State of Rhode Island.
VTR05*##F	Federal Facilities in the State of Vermont.

1.1.2 EPA Region 2: NJ, NY, PR, VI

The state of New York is the NPDES Permitting Authority for the majority of discharges within that state. New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of coverage/where EPA is permitting authority
PRR05*###	The Commonwealth of Puerto Rico.

1.1.3 EPA REGION 3: DE, DC, MD, PA, VA, WV

The state of Delaware is the NPDES Permitting Authority for the majority of discharges within that state. Maryland, Pennsylvania, and Virginia, West Virginia are the NPDES Permitting Authority for all discharges within these states.

Permit No.	Areas of coverage/where EPA is permitting authority
DCR05*###	The District of Columbia.
DER05*##F	Federal Facilities in the State of Delaware.

1.1.4 EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN

The states of Alabama, Florida, Mississippi, and North Carolina are the NPDES Permitting Authority for the majority of discharges within their respective states. Georgia, Kentucky, South Carolina and Tennessee are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of coverage/where EPA is permitting authority
ALR05*##I	Indian country lands within the State of Alabama.
FLR05*##I	Indian country lands within the State of Florida.
MSR05*##I	Indian country lands within the State of Mississippi.
NCR05*##I	Indian country lands within the State of North Carolina.

1.1.5 EPA Region 5: IL, IN, MI, MN, OH, WI

Coverage Not Available.

1.1.6 EPA Region 6: AR, LA, OK, TX, NM (Except See Region 9 for Navajo Lands, and See Region 8 for Ute Mountain Reservation Lands)

The states of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective states. Arkansas is the NPDES Permitting Authority for all discharges within that state.

Permit No.	Areas of coverage/where EPA is permitting authority
LAR05*##I	Indian country lands within the State of Louisiana.
NMR05*###	The State of New Mexico, except Indian country lands.
NMR05*##I	Indian country lands within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR05*##I listed in Part 1.1.9 and Ute Mountain Reservation Lands that are covered under Colorado permit COR05*##I listed in Part 1.1.8.
OKR05*##I	Indian country lands within the State of Oklahoma.
OKR05*##F	Facilities in the State of Oklahoma not under the jurisdiction of the Oklahoma Department of Environmental Quality, except those on Indian country lands. EPA-jurisdiction facilities include SIC codes 1311, 1381, 1382, 1389 and 5171 and point source (but not non-point source) discharges associated with agricultural production, services, and silviculture.

Permit No.	Areas of coverage/where EPA is permitting authority
TXR05*##F	Facilities in the State of Texas not under the jurisdiction of the Texas Natural Resource Conservation Commission, except those on Indian country lands. EPA-jurisdiction facilities include SIC codes 1311, 1321, 1381, 1382, and 1389 (other than oil field service company "home base" facilities).
TXR05*##I	Indian country lands within the State of Texas.

1.1.7 EPA Region 7: IA, KS, MO, NE

Coverage Not Available.

1.1.8 EPA Region 8: CO, MT, ND, SD, WY, UT (Except See Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE

The states of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of coverage/where EPA is permitting authority
COR05*##F	Federal Facilities in the State of Colorado, except those located on Indian country lands which are covered under Colorado permit COR05*##I below.
COR05*##I	Indian country lands within the State of Colorado, including the portion of the Ute Mountain Reservation located in New Mexico.
MTR05*##I	Reserved.
NDR05*##I	Indian country lands within the State of North Dakota, including that portion of the Standing Rock Reservation located in South Dakota except Indian country within the former boundaries of the Lake Traverse Reservation that is covered under South Dakota permit SDR05*##I listed below.
SDR05*##I	Indian country lands within the State of South Dakota, including the portion of the Pine Ridge Reservation located in Nebraska and the portion of Indian country within the former boundaries of the Lake Traverse Reservation located in North Dakota except for the Standing Rock Reservation that is covered under North Dakota permit NDR05*##I listed above.
UTR05*##I	Indian country lands within the State of Utah, except Goshute and Navajo Reservation lands that are covered under Arizona permit AZR05*##I (Goshute) listed in Part 1.1.9 and Nevada permit NVR05*##I (Navajo) listed in Part 1.1.9.
WYR05*##I	Indian country lands within the State of Wyoming.

1.1.9 EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR

The states of California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. Hawaii is the NPDES Permitting Authority for all discharges within that state.

Permit No.	Areas of coverage/where EPA is permitting authority
ASR05*###	The Island of American Samoa.
AZR05*###	The State of Arizona, except Indian country lands.
AZR05*##I	Indian country lands within the State of Arizona, including Navajo Reservation lands in New Mexico and Utah.
CAR05*##I	Indian country lands within the State of California.
GUR05*###	The Island of Guam.
JAR05*###	Johnston Atoll.
MWR05*###	Midway Island and Wake Island.
NIR05*###	Commonwealth of the Northern Mariana Islands.
NVR05*##I	Indian country lands within the State of Nevada, including the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah.

1.1.10 Region 10: AK, ID (Except See Region 9 for Duck Valley Reservation Lands), OR (Except See Region 9 for Fort McDermitt Reservation), WA

The states of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states. The 1995 Multi-Sector General Permit was issued in the State of Alaska on February 9, 1996 (61 FR 5247) and the terms and conditions of the 1995 permit are effective for facilities in Alaska through February 9, 2001. EPA will reissue this permit for the State of Alaska at a future date.

Permit No.	Areas of coverage/where EPA is permitting authority
AKR05*##I	Indian country lands within Alaska.
IDR05*###	The State of Idaho, except Indian country lands.
IDR05*##I	Indian country lands within the State of Idaho, except Duck Valley Reservation lands which are covered under Nevada permit NVR05*##I listed in Part 1.1.9.
ORR05*##I	Indian country lands within the State of Oregon except Fort McDermitt Reservation lands that are covered under Nevada permit NVR05*##I listed in Part 1.1.9.
WAR05*##I	Indian country lands within the State of Washington.
WAR05*##F	Federal Facilities in the State of Washington, except those located on Indian country lands.

1.2 Eligibility

You must maintain permit eligibility to discharge under this permit. Any discharges that are not compliant with the eligibility conditions of this permit are not authorized by the permit and you must either apply for a separate permit to cover those ineligible discharges or take necessary steps to make the discharges eligible for coverage.

1.2.1 Facilities Covered

Your permit eligibility is limited to discharges from facilities in the "sectors" of industrial activity based on Standard Industrial Classification (SIC) codes and Industrial Activity Codes summarized in Table 1-1. References to "sectors" in this permit (e.g., sector-specific monitoring requirements, etc.) refer to these sectors.

TABLE 1-1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT

SIC code or activity code ¹	Activity represented
Sector A: Timber Products	
2411	Log Storage and Handling (Wet deck storage areas only authorized if no chemical additives are used in the spray water or applied to the logs).
2421	General Sawmills and Planning Mills.
2426	Hardwood Dimension and Flooring Mills.
2429	Special Product Sawmills, Not Elsewhere Classified.
2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W).
2448, 2449	Wood Containers.
2451, 2452	Wood Buildings and Mobile Homes.
2491	Wood Preserving.
2493	Reconstituted Wood Products.
2499	Wood Products, Not Elsewhere Classified.
Sector B: Paper and Allied Products	
2611	Pulp Mills.
2621	Paper Mills.
2631	Paperboard Mills.
2652-2657	Paperboard Containers and Boxes.
2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes.
Sector C: Chemical and Allied Products	
2812-2819	Industrial Inorganic Chemicals.
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass.
2833-2836	Medicinal chemicals and botanical products; pharmaceutical preparations; in vitro and in vivo diagnostic substances; biological products, except diagnostic substances.
2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations.
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products.
2861-2869	Industrial Organic Chemicals.
2873-2879	Agricultural Chemicals.
2873	Facilities that Make Fertilizer Solely from Leather Scraps and Leather Dust.
2891-2899	Miscellaneous Chemical Products.
3952 (limited to list)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors.
Sector D: Asphalt Paving and Roofing Materials and Lubricants	
2951, 2952	Asphalt Paving and Roofing Materials.
2992, 2999	Miscellaneous Products of Petroleum and Coal.
Sector E: Glass Clay, Cement, Concrete, and Gypsum Products	
3211	Flat Glass.
3221, 3229	Glass and Glassware, Pressed or Blown.
3231	Glass Products Made of Purchased Glass.
3241	Hydraulic Cement.
3251-3259	Structural Clay Products.
3261-3269	Pottery and Related Products.
3271-3275	Concrete, Gypsum and Plaster Products.
3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products.
Sector F: Primary Metals	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills.
3321-3325	Iron and Steel Foundries.
3331-3339	Primary Smelting and Refining of Nonferrous Metals.
3341	Secondary Smelting and Refining of Nonferrous Metals.
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals.

TABLE 1-1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT—Continued

SIC code or activity code ¹	Activity represented
3363-3369	Nonferrous Foundries (Castings).
3398, 3399	Miscellaneous Primary Metal Products.
Sector G: Metal Mining (Ore Mining and Dressing)	
1011	Iron Ores.
1021	Copper Ores.
1031	Lead and Zinc Ores.
1041, 1044	Gold and Silver Ores.
1061	Ferroalloy Ores, Except Vanadium.
1081	Metal Mining Services.
1094, 1099	Miscellaneous Metal Ores.
Sector H: Coal Mines and Coal Mining Related Facilities	
1221-1241	Coal Mines and Coal Mining-Related Facilities.
Sector I: Oil and Gas Extraction and Refining	
1311	Crude Petroleum and Natural Gas.
1321	Natural Gas Liquids.
1381-1389	Oil and Gas Field Services.
2911	Petroleum Refineries.
Sector J: Mineral Mining and Dressing	
1411	Dimension Stone.
1422-1429	Crushed and Broken Stone, Including Rip Rap.
1442, 1446	Sand and Gravel
1455, 1459	Clay, Ceramic, and Refractory Materials.
1474-1479	Chemical and Fertilizer Mineral Mining.
1481	Nonmetallic Minerals Services, Except Fuels.
1499	Miscellaneous Nonmetallic Minerals, Except Fuels.
Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities	
HZ	Hazardous Waste Treatment Storage or Disposal.
Sector L: Landfills and Land Application Sites	
LF	Landfills, Land Application Sites, and Open Dumps.
Sector M: Automobile Salvage Yards	
5015	Automobile Salvage Yards.
Sector N: Scrap Recycling Facilities	
5093	Scrap Recycling Facilities.
Sector O: Steam Electric Generating Facilities	
SE	Steam Electric Generating Facilities.
Sector P: Land Transportation and Warehousing	
4011, 4013	Railroad Transportation.
4111-4173	Local and Highway Passenger Transportation.
4212-4231	Motor Freight Transportation and Warehousing.
4311	United States Postal Service.
5171	Petroleum Bulk Stations and Terminals.
Sector Q: Water Transportation	
4412-4499	Water Transportation.
Sector R: Ship and Boat Building or Repairing Yards	
3731,3732	Ship and Boat Building or Repairing Yards.
Sector S: Air Transportation	
4512-4581	Air Transportation Facilities.

TABLE 1-1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT—Continued

SIC code or activity code ¹	Activity represented
Sector T: Treatment Works	
TW	Treatment Works.
Sector U: Food and Kindred Products	
2011-2015	Meat Products.
2021-2026	Dairy Products.
2032	Canned, Frozen and Preserved Fruits, Vegetables and Food Specialties.
2041-2048	Grain Mill Products.
2051-2053	Bakery Products.
2061-2068	Sugar and Confectionery Products.
2074-2079	Fats and Oils.
2082-2087	Beverages.
2091-2099	Miscellaneous Food Preparations and Kindred Products.
2111-2141	Tobacco Products.
Sector V: Textile Mills, Apparel, and Other Fabric Product Manufacturing, Leather and Leather Products	
2211-2299	Textile Mill Products.
2311-2399	Apparel and Other Finished Products Made From Fabrics and Similar Materials.
3131-3199 (except 3111)	Leather and Leather Products, except Leather Tanning and Finishing (see Sector Z).
Sector W: Furniture and Fixtures	
2434	Wood Kitchen Cabinets.
2511-2599	Furniture and Fixtures.
Sector X: Printing and Publishing	
2711-2796	Printing, Publishing, and Allied Industries.
Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.	
3011	Tires and Inner Tubes.
3021	Rubber and Plastics Footwear.
3052, 3053	Gaskets, Packing, and Sealing Devices and Rubber and Plastics Hose and Belting.
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified.
3081-3089	Miscellaneous Plastics Products.
3931	Musical Instruments.
3942-3949	Dolls, Toys, Games and Sporting and Athletic Goods.
3951-3955 (except 3952 facilities as specified in Sector C).	Pens, Pencils, and Other Artists' Materials.
3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal.
3991-3999	Miscellaneous Manufacturing Industries.
3411-3499	Fabricated Metal Products, Except Machinery and Transportation Equipment.
3911-3915	Jewelry, Silverware, and Plated Ware.
Sector AB: Transportation Equipment, Industrial or Commercial Machinery	
3511-3599 (except 3571-3579)	Industrial and Commercial Machinery (except Computer and Office Equipment) (see Sector AC).
3711-3799 (except 3731, 3732)	Transportation Equipment (except Ship and Boat Building and Repairing) (see Sector R).
Sector AC: Electronic, Electrical, Photographic, and Optical Goods	
3571-3579	Computer and Office Equipment.
3612-3699	Electronic, Electrical Equipment and Components, except Computer Equipment.
3812	Measuring, Analyzing and Controlling Instrument; Photographic and Optical Goods.
Sector AD: Non-Classified Facilities	
N/A	Other storm water discharges designated by the Director as needing a permit (see 40 CFR 122.26(g)(1)(I)) or any facility discharging storm water associated with industrial activity not described by any of Sectors A-AC. Note: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.

¹ A complete list of SIC codes (and conversions from the newer North American Industry Classification System (NAICS)) can be obtained from the Internet at <http://www.census.gov/epcd/www/naics.html> or in paper form from various locations in the document entitled "Handbook of Standard Industrial Classifications," Office of Management and Budget, 1987. Industrial activity codes are provided on the Multi-Sector General Permit Notice of Intent (NOI) application form (EPA Form Number 3510-6).

1.2.1.1 *Co-located Activities.* If you have co-located industrial activities on-site that are described in a sector(s) other than your primary sector, you must comply with all other applicable sector-specific conditions found in Part 6 for the co-located industrial activities. The extra sector-specific requirements are applied only to those areas of your facility where the extra-sector activities occur. An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations, and identified by the MSGP-2000 SIC code list. For example, unless you are actually hauling substantial amounts of freight or materials with your own truck fleet or are providing a trucking service to outsiders, simple maintenance of vehicles used at your facility is unlikely to meet the SIC code group 42 description of a motor freight transportation facility. Even though Sector P may not apply, the runoff from your vehicle maintenance facility would likely still be considered storm water associated with industrial activity. As

such, your SWPPP must still address the runoff from the vehicle maintenance facility—although not necessarily with the same degree of detail as required by Sector P—but you would not be required to monitor as per Sector P.

If runoff from co-located activities commingles, you must monitor the discharge as per the requirements of all applicable sectors (regardless of the actual location of the discharge). If you comply with all applicable requirements from all applicable sections of Part 6 for the co-located industrial activities, the discharges from these co-located activities are authorized by this permit.

1.2.2 Discharges Covered

1.2.2.1 *Allowable Storm Water Discharges.* Subject to compliance with the terms and conditions of this permit, you are authorized to discharge pollutants in:

1.2.2.1.1 Discharges of storm water runoff associated with industrial activities as defined in 40 CFR 122.26 (b)(14)(i-ix and xi) from the sectors of industry described in Table 1-1, and that are specifically identified by outfall or discharge location in the Storm Water

Pollution Prevention Plan (see Part 4.2.2.3.7);

1.2.2.1.2 Non-storm water discharges as noted in Part 1.2.2.2 or otherwise specifically allowed by the permit;

1.2.2.1.3 Discharges subject to an effluent guideline listed in Table 1-2 that also meet all other eligibility requirements of the permit. Interim coverage is also available for discharges subject to a new storm water effluent limitation guideline promulgated after the effective date of this permit. Discharges subject to a New Source Performance Standard (NSPS) effluent guideline must also meet the requirements of Part 1.2.4.;

1.2.2.1.4 Discharges designated by the Director as needing a storm water permit under 40 CFR 122.26(a)(1)(v) or under 122.26(a)(9) and 122.26(g)(1)(i); and

1.2.2.1.5 Discharges comprised of a discharge listed in Parts 1.2.2.1.1 to 1.2.2.1.4 above commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

TABLE 1-2.—EFFLUENT GUIDELINES APPLICABLE TO DISCHARGES THAT MAY BE ELIGIBLE FOR PERMIT COVERAGE

Effluent guideline	New source performance standards included in effluent guidelines?	Sectors with affected facilities
Runoff from material storage piles at cement manufacturing facilities [40 CFR Part 411 Subpart C (established February 23, 1977)].	Yes	E
Contaminated runoff from phosphate fertilizer manufacturing facilities [40 CFR Part 418 Subpart A (established April 8, 1974)].	Yes	C
Coal pile runoff at steam electric generating facilities [40 CFR Part 423 (established November 19, 1982)]	Yes	O
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas [40 CFR Part 429, Subpart I (established January 26, 1981)].	Yes	A
Mine dewatering discharges at crushed stone mines [40 CFR part 436, Subpart B]	No	J
Mine dewatering discharges at construction sand and gravel mines [40 CFR part 436, Subpart C]	No	J
Mine dewatering discharges at industrial sand mines [40 CFR part 436, Subpart D]	No	J
Runoff from asphalt emulsion facilities [40 CFR Part 443 Subpart A (established July 24, 1975)]	Yes	D
Runoff from landfills, [40 CFR Part 445, Subpart A and B (established February 2, 2000)]	Yes	K & L

1.2.2.2 *Allowable Non-Storm Water Discharges.* You are also authorized for the following non-storm water discharges, provided the non-storm water component of your discharge is in compliance with Part 4.4.2 (non-storm water discharges):

- 1.2.2.2.1 Discharges from fire fighting activities;
- 1.2.2.2.2 Fire hydrant flushings;
- 1.2.2.2.3 Potable water including water line flushings;
- 1.2.2.2.4 Uncontaminated air conditioning or compressor condensate;
- 1.2.2.2.5 Irrigation drainage;
- 1.2.2.2.6 Landscape watering provided all pesticides, herbicides, and

fertilizer have been applied in accordance with manufacturer's instructions;

1.2.2.2.7 Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);

1.2.2.2.8 Routine external building wash down which does not use detergents;

1.2.2.2.9 Uncontaminated ground water or spring water;

1.2.2.2.10 Foundation or footing drains where flows are not contaminated with process materials such as solvents;

1.2.2.2.11 Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

1.2.3 Limitations on Coverage

1.2.3.1 *Prohibition on Discharges Mixed with Non-Storm Water.* You are not authorized for discharges that are mixed with sources of non-storm water. This exclusion does not apply to discharges identified in Part 1.2.2.2, provided the discharges are in compliance with Part 4.4.2 (Storm

Water Pollution Prevention Plan requirements for authorized non-storm water discharges), and to any discharge explicitly authorized by the permit.

1.2.3.2 Storm Water Discharges Associated with Construction Activity. You are not authorized for storm water discharges associated with construction activity as defined in 40 CFR 122.26(b)(14)(x) or 40 CFR 122.26(b)(15).

1.2.3.3 Discharges Currently or Previously Covered by Another Permit. You are not authorized for the following:

1.2.3.3.1 Storm water discharges associated with industrial activity that are currently covered under an individual permit or an alternative general permit.

1.2.3.3.2 Discharges previously covered by an individual permit or alternative general permit (except the 1992 "Baseline" or the 1995 Multi-Sector NPDES General Permits for Storm Water Discharges Associated With Industrial Activity) that has expired, or been terminated at the request of the permittee unless:

1.2.3.3.2.1 The individual permit did not contain numeric water quality-based limitations developed for the storm water component of the discharge; and

1.2.3.3.2.2 The permittee includes any specific BMPs for storm water required under the individual permit in the SWPPP required under Part 4 of this permit.

1.2.3.3.3 Storm water discharges associated with industrial activity from facilities where any NPDES permit has been or is in the process of being denied, terminated, or revoked by the Director (other than in a replacement permit issuance process). Upon request, the Director may waive this exclusion if operator of the facility has since passed to a different owner/operator and new circumstances at the facility justify a waiver.

1.2.3.4 Discharges Subject to Effluent Limitations Guidelines. You are not authorized for discharges subject to any effluent limitation guideline that is not included in Table 1-2. For discharges subject to a New Source Performance Standard (NSPS) effluent guideline identified in Table 1-2, you must comply with Part 1.2.4 prior to being eligible for permit coverage.

1.2.3.5 Discharge Compliance with Water Quality Standards. You are not authorized for storm water discharges that the Director determines will cause, or have reasonable potential to cause or contribute to, violations of water quality standards. Where such determinations have been made, the Director may notify

you that an individual permit application is necessary in accordance with Part 9.12. However, the Director may authorize your coverage under this permit after you have included appropriate controls and implementation procedures designed to bring your discharges into compliance with water quality standards in your Storm Water Pollution Prevention Plan.

1.2.3.6 Endangered and Threatened Species or Critical Habitat Protection. You are not authorized for discharges that do not avoid unacceptable effects on Federally listed endangered and threatened ("listed") species or designated critical habitat ("critical habitat").

Caution: Additional endangered and threatened species have been listed and critical habitat designated since the 1995 MSGP was issued. Even if you were previously covered by the 1995 MSGP, you must determine eligibility for this permit through the processes described below and in Addendum A. Where applicable, you may incorporate information from your previous endangered species analysis in your documentation of eligibility for this permit.

1.2.3.6.1 Coverage under this permit is available only if your storm water discharges, allowable non-storm water discharges, and discharge-related activities are not likely to jeopardize the continued existence of any species that are listed as endangered or threatened ("listed") under the ESA or result in the adverse modification or destruction of habitat that is designated or proposed to be designated as critical under the ESA ("critical habitat"). Submission of a signed NOI will be deemed to also constitute your certification of eligibility.

1.2.3.6.2 "Discharge-related activities" include: activities which cause, contribute to, or result in storm water point source pollutant discharges; and measures to control storm water discharges including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent storm water pollution.

1.2.3.6.3 Determining Eligibility: You must use the most recent Endangered and Threatened Species County-Species List available from EPA and the process in Addendum A (ESA Screening Process) to determine your eligibility *PRIOR* to submittal of your NOI. As of the effective date of this permit, the most current version of the List is located on the EPA Office of Water Web site at <http://www.epa.gov/owm/esalst2.htm>. You must meet one or more of the criteria in 1.2.3.6.3.1 through 1.2.3.6.3.5 below for the entire term of coverage under the permit. You

must include a certification of eligibility and supporting documentation on the eligibility determination in your Storm Water Pollution Prevention Plan.

1.2.3.6.3.1 Criteria A: No endangered or threatened species or critical habitat are in proximity to your facility or the point where authorized discharges reach the receiving water; or

1.2.3.6.3.2 Criteria B: In the course of a separate federal action involving your facility (e.g., EPA processing request for an individual NPDES permit, issuance of a CWA § 404 wetlands dredge and fill permit, etc.), formal or informal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service (the "Services") under section 7 of the Endangered Species Act (ESA) has been concluded and that consultation:

(a) Addressed the effects of your storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed species and critical habitat and

(b) The consultation resulted in either a no jeopardy opinion or a written concurrence by the Service on a finding that your storm water discharges, allowable non-storm water discharges, and discharge-related activities are not likely to adversely affect listed species or critical habitat; or

1.2.3.6.3.3 Criteria C: Your activities are authorized under section 10 of the ESA and that authorization addresses the effects of your storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed species and critical habitat; or

1.2.3.6.3.4 Criteria D: Using best judgement, you have evaluated the effects of your storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed endangered or threatened species and critical habitat and do not have reason to believe listed species or critical habitat would be adversely affected.

1.2.3.6.3.5 Criteria E: Your storm water discharges, allowable non-storm water discharges, and discharge-related activities were already addressed in another operator's certification of eligibility under Part 1.2.3.6.3.1 through 1.2.3.6.3.4 which included your facility's activities. By certifying eligibility under this Part, you agree to comply with any measures or controls upon which the other operator's certification was based;

1.2.3.6.4 The Director may require any permittee or applicant to provide documentation of the permittee or applicant's determination of eligibility for this permit using the procedures in Addendum A where EPA or the Fish

and Wildlife and/or National Marine Fisheries Services determine that there is a potential impact on endangered or threatened species or a critical habitat.

1.2.3.6.5 You are not authorized to discharge if the discharges or discharge-related activities cause a prohibited "take" of endangered or threatened species (as defined under section 3 of the Endangered Species Act and 50 CFR 17.3), unless such takes are authorized under sections 7 or 10 of the Endangered Species Act.

1.2.3.6.6 You are not authorized for any discharges where the discharges or discharge-related activities are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is designated or proposed to be designated as critical under the ESA.

1.2.3.6.7 The Endangered Species Act (ESA) provisions upon which part 1.2.3.6 is based do not apply to state-issued permits. Should administration of all or a portion of this permit be transfer to a State as a result of that State assuming the NPDES program pursuant to Clean Water Act § 402(b), Part 1.2.3.6 will not apply to any new NOIs submitted to the State after the State assumes administration of the permit (unless otherwise provided in the state program authorization agreement). Likewise, any other permit conditions based on Part 1.2.3.6 will no longer apply to new NOIs accepted by the NPDES-authorized state.

1.2.3.7 *Storm water Discharges and Storm Water Discharge-Related Activities with Unconsidered Adverse Effects on Historic Properties.*

1.2.3.7.1 *Determining Eligibility:* In order to be eligible for coverage under this permit, you must be in compliance with the National Historic Preservation Act. Your discharges may be authorized under this permit only if:

1.2.3.7.1.1 *Criteria A:* Your storm water discharges, allowable non-storm water discharges, and discharge-related activities do not affect a property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior; or

1.2.3.7.1.2 *Criteria B:* You have obtained and are in compliance with a written agreement with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) that outlines all measures you will undertake to mitigate or prevent adverse effect to the historic property.

1.2.3.7.2 Addendum B of this permit provides guidance and references to

assist you with determining your permit eligibility concerning this provision.

1.2.3.8 *Discharges to Water Quality-Impaired or Water Quality-Limited Receiving Waters.*

1.2.3.8.1 You are not authorized to discharge if your discharge is prohibited under 40 CFR 122.4(i).

1.2.3.8.2 You are not authorized to discharge any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by the EPA unless your discharge is consistent with that TMDL.

1.2.3.9 *Storm Water Discharges Subject to Anti-degradation Water Quality Standards.* You are not authorized for discharges that do not comply with your State or Tribe's anti-degradation policy for water quality standards. State and Tribal anti-degradation policies can be obtained from the appropriate State or Tribal environmental office or their Internet sites.

1.2.4 Discharges Subject to New Source Performance Standards (NSPS)¹

1.2.4.1 *Documentation of New Source Review.* If you have a discharge(s) subject to a NSPS effluent guideline, you must obtain and retain the following on site prior to the submittal of your Notice of Intent:

1.2.4.1.1 Documentation from EPA of "No Significant Impact" or

1.2.4.1.2 A completed Environmental Impact Statement in accordance with an environmental review conducted by EPA pursuant to 40 CFR 6.102(a)(6).

1.2.4.2 *Initiating a New Source Review.* If the Agency's decision has not been obtained, you may use the format and procedures specified in Addendum C to submit information to EPA to initiate the process of the environmental review.

To maintain eligibility, you must implement any mitigation required of the facility as a result of the National Environmental Policy Act (NEPA) review process. Failure to implement mitigation measures upon which the Agency's NEPA finding is based is

¹NSPS apply only to discharges from those facilities or installations that were constructed after the promulgation of NSPS. For example, storm water discharges from areas where the production of asphalt paving and roofing emulsions occurs are subject to NSPS only if the asphalt emulsion facility was constructed after July 24, 1975.

²The provisions specified in Part 1.2.2.3 and Part 1.2.4 related to documenting New Source reviews are requirements of Federal programs under the National Environmental Policy Act of 1969 and will not apply to such facilities in the event that authority for the NPDES program has been assumed by the State/Tribe agency and administration of this permit has been transferred to the State/Tribe.

grounds for termination of permit coverage.

1.2.4.3 *NEPA Requirements after State Assumption of this Permit.* The National Environmental Policy Act (NEPA) provisions upon which part 1.2.4 is based do not apply to state-issued permits. Should administration of all or a portion of this permit be transfer to a State as a result of that State assuming the NPDES program pursuant to Clean Water Act § 402(b), Part 1.2.4 will not apply to any new NOIs submitted to the State after the State assumes administration of the permit. Likewise, any other permit conditions based on Part 1.2.4 will no longer apply to new NOIs accepted by the NPDES-authorized state.

1.3 How To Obtain Authorization Under This Permit

1.3.1 Basic Eligibility

You may be authorized under this permit only if you have a discharge of storm water associated with industrial activity from your facility. In order to obtain authorization under this permit, you must:

1.3.1.1 Meet the Part 1.2 eligibility requirements; and

1.3.1.2 Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) (see definition in Part 12) according to the requirements in Part 4 of this permit.

1.3.1.3 Submit a complete Notice of Intent (NOI) in accordance with the requirements of Part 2 of this permit. Any new operator at a facility, including those who replace an operator who has previously obtained permit coverage, must submit an NOI to be covered for discharges for which they are the operator.

1.3.2 Effective Date of Permit Coverage

Unless notified by the Director to the contrary, if you submit a correctly completed NOI in accordance with the requirements of this permit, you are authorized to discharge under the terms and conditions of this permit two (2) days after the date the NOI is postmarked (but in no event, earlier than the effective date of the permit). The Director may deny coverage under this permit and require submission of an application for an individual NPDES permit based on a review of your NOI or other information (see Part 9.12). Authorization to discharge is not automatically granted two days after the NOI is mailed if your NOI is materially incomplete (e.g., critical information left off, NOI unsigned, etc.) or if your discharge(s) is not eligible for coverage by the permit.

1.4 Terminating Coverage

1.4.1 Submitting a Notice of Termination

If you wish to terminate coverage under this permit, you must submit a Notice of Termination (NOT) in accordance with Part 11 of this permit. You must continue to comply with this permit until you submit an NOT. Your authorization to discharge under the permit terminates at midnight of the day the NOT is signed.

1.4.2 When to Submit an NOT

You must submit an NOT within thirty (30) days after one or more of the following conditions have been met:

1.4.2.1 A new owner/operator has assumed responsibility for the facility

1.4.2.2 You have ceased operations at the facility and there no longer are discharges of storm water associated with industrial activity from the facility and you have already implemented necessary sediment and erosion controls as required by Part 4.2.7.2.2.1

1.4.3 Discharges After the NOT Is Submitted

Enforcement actions may be taken if you submit an NOT without meeting one or more of these conditions, unless you have obtained coverage under an alternate permit or have satisfied the requirements of Part 1.5.

1.5 Conditional Exclusion for No Exposure

If you are covered by this permit, but later are able to file a "no exposure" certification to be excluded from permitting under 40 CFR 122.26(g), you are no longer authorized by nor required to comply with this permit. If you are no longer required to have permit coverage due to a "no exposure" exclusion, you are not required to submit a Notice of Termination.

2. Notice of Intent Requirements

2.1 Notice of Intent (NOI) Deadlines

Your NOI must be submitted in accordance with the deadlines in Table 2-1. You must meet all applicable eligibility conditions of Part 1.2 before you submit your NOI.

TABLE 2.-1—DEADLINES FOR NOI SUBMITTAL

Category	Deadline
1. Existing discharges covered under the 1995 MSGP (see also Part 2.1.2—Interim Coverage).	December 29, 2000.

TABLE 2.-1—DEADLINES FOR NOI SUBMITTAL—Continued

Category	Deadline
2. New discharges	Two (2) days prior to commencing operation of the facility with discharges of storm water associated with industrial activity.
3. New owner/operator of existing discharges.	Two (2) days prior to taking operational control of the facility.
4. Continued coverage when the permit expires in 2005.	See Part 9.2

Only one NOI need be submitted to cover all of your activities at the facility (e.g., you do not need to submit a separate NOI for each separate type of industrial activity located at a facility or industrial complex, provided your SWPPP covers each area for which you are an operator).

2.1.1 Submitting a Late NOI

You are not prohibited from submitting an NOI after the dates provided in Table 2-1. If a late NOI is submitted, your authorization is only for discharges that occur after permit coverage is granted. The Agency reserves the right to take appropriate enforcement actions for any unpermitted discharges.

2.1.2 Interim Permit Coverage for 1995 MSGP Permittees

If you had coverage for your facility under the 1995 MSGP, you may be eligible for continued coverage under this permit on an interim basis.

2.1.2.1 *Discharges Authorized Under the 1995 MSGP.* If permit coverage for your facility under the 1995 MSGP was effective as of the date the 1995 MSGP expired (or the date this permit replaced the 1995 MSGP if earlier), your authorization is automatically continued into this replacement permit on an interim basis for up to ninety (90) days from the effective date of the permit. Interim coverage will terminate earlier than the 90 days when an NOI has been submitted and coverage either granted or denied; or after submittal of an NOT.

2.1.2.2 *Discharges Authorized Under the 1995 MSGP, But Not Clearly Eligible for Coverage Under This Permit.* If you were previously covered by the 1995 MSGP, but cannot meet (or cannot immediately determine if you meet) the eligibility requirements of this permit, you may nonetheless be authorized

under this permit for a period not to exceed 270 days from the date this permit is published in the **Federal Register**, provided you submit an application for an alternative permit within 90 days from the permit publication date.

2.1.2.3 *Interim Coverage Permit Requirements.* While you are operating under interim coverage status, you must:

2.1.2.3.1 Submit a complete NOI (see Part 2.2) by the deadlines listed in Table 2-1 or Part 2.1.2.2 above.

2.1.2.3.2 Comply with the terms and conditions of the 1995 MSGP.

2.1.2.3.3 Update your Storm Water Pollution Prevention Plan to comply with the requirements of this permit within 90 days after the effective date of this permit.

2.2 Contents of Notice of Intent (NOI)

Your NOI for coverage under this permit must include the following information:

2.2.1 Permit Selection

2.2.1.1 If you were covered under the previous MSGP, provide the permit number assigned to your facility.

2.2.2 Owner/Operator Information

2.2.2.1 The name, address, and telephone number of the operator (e.g., your company, etc.) filing the NOI for permit coverage;

2.2.3 Facility Information

2.2.3.1 The name (or other identifier), address, county, and latitude/longitude of the facility for which the NOI is submitted;

2.2.3.2 An indication of whether you are a Federal, State, Tribal, private, or other public entity;

2.2.3.3 An indication of whether the facility is located on Indian country lands;

2.2.3.4 Certification that a Storm Water Pollution Prevention Plan (SWPPP) meeting the requirements of Part 4 has been developed (including attaching a copy of this permit to the plan);

2.2.3.5 The name of the receiving water(s);

2.2.3.6 The name of the municipal operator if the discharge is through a municipal separate storm sewer system, unless you are the owner/operator of that municipal separate storm sewer system;

2.2.3.7 Identification of applicable sector(s) in this permit, as designated in Table 1-1, that cover the discharges associated with industrial activity you wish to cover under this permit;

2.2.3.8 Up to four 4-digit Standard Industrial Classification (SIC) codes or

the 2-letter Activity Codes for hazardous waste treatment, storage, or disposal activities (HZ); land/disposal facilities that receive or have received any industrial waste (LF); steam electric power generating facilities (SE); or treatment works treating domestic sewage (TW) that best represent the principal products produced or services rendered by your facility and major co-located activities;

2.2.4 Eligibility Screening

2.2.4.1 Based on the instructions in Addendum A, whether any listed or proposed threatened or endangered species, or designated critical habitat, are in proximity to the storm water discharges or storm water discharge-related activities to be covered by this permit;

2.2.4.2 Whether any historic property listed or eligible for listing on the National Register of Historic Places is located on the facility or in proximity to the discharge;

2.2.4.3 A signed and dated certification, signed by a authorized representative of your facility and maintained with your SWPPP, as detailed in Part 9.7 that certifies the following:

"I certify under penalty of law that I have read and understand the Part 1.2 eligibility requirements for coverage under the multi-sector storm water general permit including those requirements relating to the protection of endangered or threatened species or critical habitat. To the best of my knowledge, the storm water and allowable non-storm discharges authorized by this permit (and discharged related activities), pose no jeopardy to endangered or threatened species or critical habitat, or are otherwise eligible for coverage under Part 1.2.3.6 of the permit. To the best of my knowledge, I further certify that such discharges and discharge related activities do not have an effect on properties listed or eligible for listing on the National Register or Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part 1.2.3.7 of the permit. I understand that continued coverage under the multi-sector storm water general permit is contingent upon maintaining eligibility as provided for in Part 1.2"

2.3 Use of NOI Form

You must submit the information required under Part 2.2 on the latest version of the NOI form (or photocopy thereof) contained in Addendum D. Your NOI must be signed and dated in accordance with Part 9.7 of this permit.

Note: If EPA notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other NOI form options that become available at a later date (e.g., electronic submission of forms), you may take advantage of those options to satisfy the NOI use and submittal requirements of Part 2.

2.4 Where To Submit

Your NOI must be signed in accordance with Part 9.7 of this permit and submitted to the Director of the NPDES Permitting Program at the following address: Storm Water Notice of Intent (4203), US EPA, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

2.5 Additional Notification

If your facility discharges through a large or medium municipal separate storm sewer system (MS4), or into a MS4 that has been designated by the permitting authority, you must also submit a signed copy of the NOI to the operator of that MS4 upon request by the MS4 operator.

3. Special Conditions

3.1 Hazardous Substances or Oil

You must prevent or minimize the discharge of hazardous substances or oil in your discharge(s) in accordance with the Storm Water Pollution Prevention Plan for your facility. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

3.1.1 Single Releases and Spills

Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302, occurs during a 24 hour period:

3.1.1.1 You must notify the National Response Center (NRC) (800-424-8802; in the Washington, DC, metropolitan area call 202-426-2675) in accordance with the requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 as soon as he or she has knowledge of the discharge;

3.1.1.2 You must modify your Storm Water Pollution Prevention Plan required under Part 4 within 14 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, you must review your plan to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and you must modify your plan where appropriate.

3.1.2 Anticipated Discharges

Anticipated discharges containing a hazardous substance in an amount equal to or in excess of reporting quantities are those caused by events occurring within the scope of the relevant operating system. If your facilities has (or will have) more than one anticipated

discharge per year containing a hazardous substance in an amount equal to or in excess of a reportable quantity, you must:

3.1.2.1 Submit notifications of the first release that occurs during a calendar year (or for the first year of this permit, after submittal of an NOI); and

3.1.2.2 Provide a written description in the SWPPP of the dates on which such releases occurred, the type and estimate of the amount of material released, and the circumstances leading to the releases. In addition, your SWPPP must address measures to minimize such releases.

3.1.2.3 Where a discharge of a hazardous substance or oil in excess of reporting quantities is caused by a non-storm water discharge (e.g., a spill of oil into a separate storm sewer), that discharge is not authorized by the MSGP and you must report the discharge as required under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 (see Part 3.1.1. above). In the event of a spill, the requirements of Section 311 of the CWA and other applicable provisions of Sections 301 and 402 of the CWA continue to apply.

3.2 Additional Requirements for Salt Storage

If you have storage piles of salt used for deicing or other commercial or industrial purposes, they must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States or the discharges from the piles are authorized under another permit.

3.3 Discharge Compliance With Water Quality Standards

Your discharges must not be causing or have the reasonable potential to cause or contribute to a violation of a water quality standard. Where a discharge is already authorized under this permit and is later determined to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard, the Director will notify you of such violation(s). You must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document these actions in the Storm Water Pollution Prevention Plan. If violations remain or re-occur, then coverage under this permit may be terminated by the Director, and an alternative general permit or individual permit may be issued. Compliance with

this requirement does not preclude any enforcement activity as provided by the Clean Water Act for the underlying violation.

4. Storm Water Pollution Prevention Plans

4.1 Storm Water Pollution Prevention Plan Requirements

You must prepare a Storm Water Pollution Prevention Plan (SWPPP) for your facility before submitting your Notice of Intent for permit coverage. Your SWPPP must be prepared in accordance with good engineering practices. Use of a registered professional engineer for SWPPP preparation is not required by the permit, but may be independently required under state law and/or local ordinance. Your SWPPP must:

4.1.1 Identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from your facility;

4.1.2 Describe and ensure implementation of practices which you will use to reduce the pollutants in storm water discharges from the facility; and

4.1.3 assure compliance with the terms and conditions of this permit.

Note: At larger installations such as military bases where there are well-defined industrial versus non-industrial areas, the SWPPP required under this Part need only address those areas with discharges of storm water associated with industrial activity. (e.g., under this permit, a U.S. Air Force Base would need to address the vehicle maintenance areas associated with the "airport" portion of the base in the SWPPP, but would not need to address a car wash that served only the on-base housing areas.)

4.2 Contents of Plan

4.2.4.2.1 Pollution Prevention Team

You must identify the staff individual(s) (by name or title) that comprise the facility's storm water Pollution Prevention Team. Your Pollution Prevention Team is responsible for assisting the facility/plant manager in developing, implementing, maintaining and revising the facility's SWPPP. Responsibilities of each staff individual on the team must be listed.

4.2.2 Site Description

Your SWPPP must include the following:

4.2.2.1 *Activities at Facility.* description of the nature of the industrial activity(ies) at your facility;

4.2.2.2 *General Location Map.* a general location map (e.g., U.S.G.S. quadrangle, or other map) with enough detail to identify the location of your

facility and the receiving waters within one mile of the facility;

4.2.2.3 *A legible site map identifying the following:*

4.2.2.3.1 Directions of storm water flow (e.g. use arrows to show which ways storm water will flow);

4.2.2.3.2 Locations of all existing structural BMPs;

4.2.2.3.3 Locations of all surface water bodies;

4.2.2.3.4 Locations of potential pollutant sources identified under 4.2.4 and where significant materials are exposed to precipitation;

4.2.2.3.5 Locations where major spills or leaks identified under 4.2.5 have occurred;

4.2.2.3.6 Locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, and liquid storage tanks;

4.2.2.3.7 Locations of storm water outfalls and an approximate outline of the area draining to each outfall;

4.2.2.3.8 Location and description of non-storm water discharges;

4.2.2.3.9 Locations of the following activities where such activities are exposed to precipitation: processing and storage areas; access roads, rail cars and tracks; the location of transfer of substance in bulk; and machinery;

4.2.2.3.10 Location and source of runoff from adjacent property containing significant quantities of pollutants of concern to the facility (an evaluation of how the quality of the storm water running onto your facility impacts your storm water discharges may be included).

4.2.3 Receiving Waters and Wetlands

You must provide the name of the nearest receiving water(s), including intermittent streams, dry sloughs, arroyos and the areal extent and description of wetland or other "special aquatic sites" (see Part 12 for definition) that may receive discharges from your facility.

4.2.4 Summary of Potential Pollutant Sources

You must identify each separate area at your facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and

unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. For each, separate area identified, the description must include:

4.2.4.1 *Activities in Area.* A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams); and

4.2.4.2 *Pollutants.* A list of the associated pollutant(s) or pollutant parameter(s) (e.g., crankcase oil, iron, biochemical oxygen demand, pH, etc.) for each activity. The pollutant list must include all significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three (3) years before being covered under this permit and the present.

4.2.5 Spills and Leaks

You must clearly identify areas where potential spills and leaks, which can contribute pollutants to storm water discharges, can occur, and their accompanying drainage points. For areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility to be covered under this permit, you must provide a list of significant spills and leaks of toxic or hazardous pollutants that occurred during the three (3) year period prior to the date of the submission of a Notice of Intent (NOI). Your list must be updated if significant spills or leaks occur in exposed areas of your facility during the time you are covered by the permit.

Significant spills and leaks include, but are not limited to releases of oil or hazardous substances in excess of quantities that are reportable under CWA § 311 (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements.

4.2.6 Sampling Data

You must provide a summary of existing storm water discharge sampling data taken at your facility. All storm water sampling data collected during the term of this permit must also be summarized and included in this part of the SWPPP.

4.2.7 Storm Water Controls

4.2.7.1 *Description of Existing and Planned BMPs.* Describe the type and location of existing non-structural and structural best management practices (BMPs) selected for each of the areas where industrial materials or activities

are exposed to storm water. All the areas identified in Part 4.2.4 should have a BMP(s) identified for the area's discharges. For areas where BMPs are not currently in place, describe appropriate BMPs that you will use to control pollutants in storm water discharges. Selection of BMPs should take into consideration:

4.2.7.1.1 The quantity and nature of the pollutants, and their potential to impact the water quality of receiving waters;

4.2.7.1.2 Opportunities to combine the dual purposes of water quality protection and local flood control benefits (including physical impacts of high flows on streams—e.g., bank erosion, impairment of aquatic habitat, etc.);

4.2.7.1.3 Opportunities to offset the impact of impervious areas of the facility on ground water recharge and base flows in local streams (taking into account the potential for ground water contamination—See "User's Guide to the MSGP-2000" section on groundwater considerations).

4.2.7.2 *BMP Types to be Considered.* The following types of structural, non-structural and other BMPs must be considered for implementation at your facility. Describe how each is, or will be, implemented. This requirement may have been fulfilled with the area-specific BMPs identified under Part 4.2.7.2, in which case the previous description is sufficient. However, many of the following BMPs may be more generalized or non site-specific and therefore not previously considered. If you determine that any of these BMPs are not appropriate for your facility, you must include an explanation of why they are not appropriate. The BMP examples listed below are not intended to be an exclusive list of BMPs that you may use. You are encouraged to keep abreast of new BMPs or new applications of existing BMPs to find the most cost effective means of permit compliance for your facility. If BMPs are being used or planned at the facility which are not listed here (e.g., replacing a chemical with a less toxic alternative, adopting a new or innovative BMP, etc.), include descriptions of them in this section of the SWPPP.

4.2.7.2.1 *Non-Structural BMPs.*

4.2.7.2.1.1 *Good Housekeeping:* You must keep all exposed areas of the facility in a clean, orderly manner where such exposed areas could contribute pollutants to storm water discharges. Common problem areas include: around trash containers, storage areas and loading docks. Measures must also include: a schedule for regular pickup and disposal of

garbage and waste materials; routine inspections for leaks and conditions of drums, tanks and containers.

4.2.7.2.1.2 *Minimizing Exposure:* Where practicable, industrial materials and activities should be protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, or runoff.

Note: Eliminating exposure at all industrial areas may make the facility eligible for the 40 CFR 122.26(g) "No Exposure" exclusion from needing to have a permit.

4.2.7.2.1.3 *Preventive Maintenance:* You must have a preventive maintenance program which includes timely inspection and maintenance of storm water management devices, (e.g., cleaning oil/water separators, catch basins) as well as inspecting, testing, maintaining and repairing facility equipment and systems to avoid breakdowns or failures that may result in discharges of pollutants to surface waters.

4.2.7.2.1.4 *Spill Prevention and Response Procedures:* You must describe the procedures which will be followed for cleaning up spills or leaks. Those procedures, and necessary spill response equipment, must be made available to those employees that may cause or detect a spill or leak. Where appropriate, you must explain existing or planned material handling procedures, storage requirements, secondary containment, and equipment (e.g., diversion valves), which are intended to minimize spills or leaks at the facility. Measures for cleaning up hazardous material spills or leaks must be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265.

4.2.7.2.1.5 *Routine Facility Inspections:* In addition to or as part of the comprehensive site evaluation required under Part 4.9, you must have qualified facility personnel inspect all areas of the facility where industrial materials or activities are exposed to storm water. The inspections must include an evaluation of existing storm water BMPs. Your SWPPP must identify how often these inspections will be conducted. You must correct any deficiencies in implementation of your SWP3 you find as soon as practicable, but not later than within 14 days of the inspection. You must document in your SWPPP the results of your inspections and the corrective actions you took in response to any deficiencies or opportunities for improvement that you identify.

4.2.7.2.1.6 *Employee Training:* You must describe the storm water employee training program for the facility. The

description should include the topics to be covered, such as spill response, good housekeeping and material management practices, and must identify periodic dates (e.g., every 6 months during the months of July and January) for such training. You must provide employee training for all employees that work in areas where industrial materials or activities are exposed to storm water, and for employees that are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance people). The employee training should inform them of the components and goals of your SWPPP.

4.2.7.2.2 *Structural BMPs.*

4.2.7.2.2.1 *Sediment and Erosion Control:* You must identify the areas at your facility which, due to topography, land disturbance (e.g., construction), or other factors, have a potential for significant soil erosion. You must describe the structural, vegetative, and/or stabilization BMPs that you will be implementing to limit erosion.

4.2.7.2.2.2 *Management of Runoff:* You must describe the traditional storm water management practices (permanent structural BMPs other than those which control the generation or source(s) of pollutants) that currently exist or that are planned for your facility. These types of BMPs typically are used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water discharges from the site. All BMPs that you determine are reasonable and appropriate, or are required by a State or local authority; or are necessary to maintain eligibility for the permit (see Part 1.2.3—Limitations on Coverage) must be implemented and maintained. Factors to consider when you are selecting appropriate BMPs should include: (1) The industrial materials and activities that are exposed to storm water, and the associated pollutant potential of those materials and activities; and (2) the beneficial and potential detrimental effects on surface water quality, ground water quality, receiving water base flow (dry weather stream flow), and physical integrity of receiving waters. (See "User's Guide to the MSGP-2000" for Considerations in Selection of BMPs) Structural measures should be placed on upland soils, avoiding wetlands and floodplains, if possible. Structural BMPs may require a separate permit under section 404 of the CWA before installation begins.

4.2.7.2.2.3 *Example BMPs:* BMPs you could use include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions;

infiltration of runoff onsite; and sequential systems (which combine several practices).

4.2.7.2.3 *Other Controls.* No solid materials, including floatable debris, may be discharged to waters of the United States, except as authorized by a permit issued under section 404 of the CWA. Off-site vehicle tracking of raw, final, or waste materials or sediments, and the generation of dust must be minimized. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas must be minimized. Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel if they are necessary to provide a non-erosive flow velocity from the structure to a water course.

4.3 Maintenance

All BMPs you identify in your SWPPP must be maintained in effective operating condition. If site inspections required by Part 4.9 identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. In the case of non-structural BMPs, the effectiveness of the BMP must be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

4.4 Non-Storm Water Discharges

4.4.1 Certification of Non-Storm Water Discharges

4.4.1.1 Your SWPPP must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-storm water. The certification must be signed in accordance with Part 9.7 of this permit, and include:

4.4.1.1.1 The date of any testing and/or evaluation;

4.4.1.1.2 Identification of potential significant sources of non-storm water at the site;

4.4.1.1.3 A description of the results of any test and/or evaluation for the presence of non-storm water discharges;

4.4.1.1.4 A description of the evaluation criteria or testing method used; and

4.4.1.1.5 A list of the outfalls or onsite drainage points that were directly observed during the test.

4.4.1.2 You do not need to sign a new certification if one was already completed for either the 1992 baseline

Industrial General Permit or the 1995 Multi-sector General Permit and you have no reason to believe conditions at the facility have changed.

4.4.1.3 If you are unable to provide the certification required (testing for non-storm water discharges), you must notify the Director 180 days after submitting an NOI to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification must describe:

4.4.1.3.1 Reason(s) why certification was not possible;

4.4.1.3.2 The procedure of any test attempted;

4.4.1.3.3 The results of such test or other relevant observations; and

4.4.1.3.4 Potential sources of non-storm water discharges to the storm sewer.

4.4.1.4 A Copy of the notification must be included in the SWPPP at the facility. Non-storm water discharges to waters of the United States which are not authorized by an NPDES permit are unlawful, and must be terminated.

4.4.2 Allowable Non-Storm Water Discharges

4.4.2.1 Certain sources of non-storm water are allowable under this permit (see 1.2.2.2—Allowable Non-Storm Water Discharges). In order for these discharges to be allowed, your SWPPP must include:

4.4.2.1.1 Identification of each allowable non-storm water source;

4.4.2.1.2 The location where it is likely to be discharged; and

4.4.2.1.3 Descriptions of appropriate BMPs for each source.

4.4.2.2 Except for flows from fire fighting activities, you must identify in your SWPPP all sources of allowable non-storm water that are discharged under the authority of this permit.

4.4.2.3 If you include mist blown from cooling towers amongst your allowable non-storm water discharges, you must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower and determined that the levels of such chemicals in the discharges would not cause or contribute to a violation of an applicable water quality standard after implementation of the BMPs you have selected to control such discharges.

4.5 Documentation of Permit Eligibility Related to Endangered Species

Your SWPPP must include documentation supporting your determination of permit eligibility with regard to Part 1.2.3.6 (Endangered Species), including:

4.5.1 Information on whether listed endangered or threatened species, or critical habitat, are found in proximity to your facility;

4.5.2 Whether such species may be affected by your storm water discharges or storm water discharge-related activities;

4.5.3 Results of your Addendum A endangered species screening determinations; and

4.5.4 A description of measures necessary to protect listed endangered or threatened species, or critical habitat, including any terms or conditions that are imposed under the eligibility requirements of Part 1.2.3.6. If you fail to describe and implement such measures, your discharges are ineligible for coverage under this permit.

4.6 Documentation of Permit Eligibility Related to Historic Places

Your SWPPP must include documentation supporting your determination of permit eligibility with regard to Part 1.2.3.7 (Historic Places), including:

4.6.1 Information on whether your storm water discharges or storm water discharge-related activities would have an effect on a property that is listed or eligible for listing on the National Register of Historic Places;

4.6.2 Where effects may occur, any written agreements you have made with the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other Tribal leader to mitigate those effects;

4.6.3 Results of your Addendum B historic places screening determinations; and

4.6.4 Description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the National Register of Historic Places, including any terms or conditions that are imposed under the eligibility requirements of Part 1.2.3.7 of this permit. If you fail to describe and implement such measures, your discharges are ineligible for coverage under this permit.

4.7 Copy of Permit Requirements

You must include a copy of this permit in your SWPPP.

Note: The confirmation of coverage letter you receive from the NOI Processing Center assigning your permit number IS NOT your permit—it merely acknowledges that your NOI has been accepted and you have been authorized to discharge subject to the terms and conditions of today's permit.

4.8 Applicable State, Tribal or Local Plans

Your SWPPP must be consistent (and updated as necessary to remain

consistent) with applicable State, Tribal and/or local storm water, waste disposal, sanitary sewer or septic system regulations to the extent these apply to your facility and are more stringent than the requirements of this permit.

4.9 Comprehensive Site Compliance Evaluation

4.9.1 Frequency and Inspectors

You must conduct facility inspections at least once a year. The inspections must be done by qualified personnel provided by you. The qualified personnel you use may be either your own employees or outside consultants that you have hired, provided they are knowledgeable and possess the skills to assess conditions at your facility that could impact storm water quality and assess the effectiveness of the BMPs you have chosen to use to control the quality of your storm water discharges. If you decide to conduct more frequent inspections, your SWPPP must specify the frequency of inspections.

4.9.2 Scope of the Compliance Evaluation

Your inspections must include all areas where industrial materials or activities are exposed to storm water, as identified in 4.2.4, and areas where spills and leaks have occurred within the past 3 years. Inspectors should look for: (a) Industrial materials, residue or trash on the ground that could contaminate or be washed away in storm water; (b) leaks or spills from industrial equipment, drums, barrels, tanks or similar containers; (c) offsite tracking of industrial materials or sediment where vehicles enter or exit the site; (d) tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas and (e) for evidence of, or the potential for, pollutants entering the drainage system. Results of both visual and any analytical monitoring done during the year must be taken into consideration during the evaluation. Storm water BMPs identified in your SWPPP must be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they must be inspected to see whether BMPs are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected if possible.

4.9.3 Follow-Up Actions

Based on the results of the inspection, you must modify your SWPPP as necessary (e.g., show additional controls on map required by Part 4.2.2.3; revise description of controls required by Part

4.2.7 to include additional or modified BMPs designed to correct problems identified. You must complete revisions to the SWPPP within 14 calendar days following the inspection. If existing BMPs need to be modified or if additional BMPs are necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than twelve (12) weeks after completion of the comprehensive site evaluation.

4.9.4 Compliance Evaluation Report

You must insure a report summarizing the scope of the inspection, name(s) of personnel making the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWPPP is completed and retained as part of the SWPPP for at least three years from the date permit coverage expires or is terminated. Major observations should include: the location(s) of discharges of pollutants from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. You must retain a record of actions taken in accordance with Part 4.9 of this permit as part of the Storm Water Pollution Prevention Plan for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance. Where an inspection report does not identify any incidents of non-compliance, the report must contain a certification that the facility is in compliance with the Storm Water Pollution Prevention Plan and this permit. Both the inspection report and any reports of follow-up actions must be signed in accordance with Part 9.7 (reporting) of this permit.

4.9.5 Credit As a Routine Facility Inspection

Where compliance evaluation schedules overlap with inspections required under Part 4.2.7.2.1.5, your annual compliance evaluation may also be used as one of the Part 4.2.7.5 routine inspections.

4.10 Maintaining Updated SWPPP

You must amend the Storm Water Pollution Prevention Plan whenever:

4.10.1 there is a change in design, construction, operation, or maintenance at your facility which has a significant effect on the discharge, or potential for discharge, of pollutants from your facility;

4.10.2 During inspections, monitoring, or investigations by you or by local, State, Tribal or Federal officials it is determined the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified under 4.2.4, or is otherwise not achieving the general objectives of controlling pollutants in discharges from your facility.

4.11 Signature, Plan Review and Making Plans Available

4.11.1 You must sign your SWPPP in accordance with Part 9.7, and retain the plan on-site at the facility covered by this permit (see Part 8 for records retention requirements).

4.11.2 You must keep a copy of the SWPPP on-site or locally available to the Director for review at the time of an on-site inspection. You must make your SWPPP available upon request to the Director, a State, Tribal or local agency approving storm water management plans, or the operator of a municipal separate storm sewer receiving discharge from the site. Also, in the interest of the public's right to know, you must provide a copy of your SWPPP to the public if requested in writing to do so.

4.11.3 The Director may notify you at any time that your SWPPP does not meet one or more of the minimum requirements of this permit. The notification will identify provisions of this permit which are not being met, as well as the required modifications. Within thirty (30) calendar days of receipt of such notification, you must make the required changes to the SWPPP and submit to the Director a written certification that the requested changes have been made.

4.11.4 You must make the SWPPP available to the USFWS or NMFS upon request.

4.12 Additional Requirements for Storm Water Discharges Associated With Industrial Activity From Facilities Subject to EPCRA Section 313 Reporting Requirements

Potential pollutant sources for which you have reporting requirements under EPCRA 313 must be identified in your summary of potential pollutant sources as per Part 4.2.4. Note this additional requirement only applies to you if you are subject to reporting requirements under EPCRA 313.

5. Monitoring Requirements and Numeric Limitations

There are five individual and separate categories of monitoring requirements and numeric limitations that your facility may be subject to under this

permit. The monitoring requirements and numeric limitations applicable to your facility depend on a number of factors, including: (1) The types of industrial activities generating storm water runoff from your facility, and (2) the state or tribe where your facility is located. Part 6 identifies monitoring requirements applicable to specific sectors of industrial activity. Part 13 contains additional requirements that apply only to facilities located in a particular State or Indian country land. You must review Parts 5, 6 and 13 of the permit to determine which monitoring requirements and numeric limitations apply to your facility. Unless otherwise specified, limitations and monitoring requirements under Parts 5, 6, and 13 are additive.

Sector-specific monitoring requirements and limitations are applied discharge by discharge at facilities with co-located activities. Where storm water from the co-located activities are co-mingled, the monitoring requirements and limitations are additive. Where more than one numeric limitation for a specific parameter applies to a discharge, compliance with the more restrictive limitation is required. Where monitoring requirements for a monitoring quarter overlap (e.g., need to monitor TSS 1/ year for a limit and also 1/quarter for benchmark monitoring), you may use a single sample to satisfy both monitoring requirements.

5.1 Types of Monitoring Requirements and Limitations

5.1.1 Quarterly Visual Monitoring

The requirements and procedures for quarterly visual monitoring are applicable to all facilities covered under this permit, regardless of your facility's sector of industrial activity.

5.1.1.1 You must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination must be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, you are excused

from visual monitoring for that quarter provided you document in your monitoring records that no runoff occurred. You must sign and certify the documentation in accordance with Part 9.7.

5.1.1.2 Your visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from your facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. If no qualifying storm event resulted in runoff from the facility during a monitoring quarter, you are excused from visual monitoring for that quarter provided you document in your monitoring records that no qualifying storm event occurred that resulted in storm water runoff during that quarter. You must sign and certify the documentation in accordance with Part 9.7.

5.1.1.3 You must maintain your visual examination reports onsite with the Storm Water Pollution Prevention Plan. The report must include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other

obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

5.1.1.4 Inactive and Unstaffed Sites: When you are unable to conduct visual storm water examinations at an inactive and unstaffed site, you may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. If you exercise this waiver, you must maintain a certification with the Storm Water Pollution Prevention Plan stating that the site is inactive and unstaffed and that performing visual examinations during a qualifying event is not feasible. You must sign and certify the waiver in accordance with Part 9.7.

5.1.2 Benchmark Monitoring of Discharges Associated With Specific Industrial Activities

Table 5-1 identifies the specific industrial sectors subject to the Benchmark Monitoring requirements of this permit and the industry-specific pollutants of concern. You must refer to the tables found in the individual Sectors in Part 6 for Benchmark Monitoring Cut-Off Concentrations. If your facility has co-located activities (see Part 1.2.1.1) described in more than one sector in Part 6, you must comply with all applicable benchmark monitoring requirements from each sector.

The results of benchmark monitoring are primarily for your use to determine the overall effectiveness of your SWPPP in controlling the discharge of pollutants to receiving waters. Benchmark values, included in Part 6 of this permit, are not viewed as effluent limitations. An exceedance of a benchmark value does not, in and of itself, constitute a violation of this permit. While exceedance of a benchmark value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary. In addition, exceedance of benchmark values may identify facilities that would be more appropriately covered under an individual, or alternative general permit where more specific pollution prevention controls could be required.

TABLE 5-1.—INDUSTRY SECTORS/SUB-SECTORS SUBJECT TO BENCHMARK MONITORING

MSGP sector ¹	Industry sub-sector	Required parameters for benchmark monitoring
A	General Sawmills and Planing Mills	COD, TSS, Zinc.
	Wood Preserving Facilities	Arsenic, Copper.
	Log Storage and Handling	TSS.
	Hardwood Dimension and Flooring Mills	COD, TSS.
B	Paperboard Mills	COD.

TABLE 5-1.—INDUSTRY SECTORS/SUB-SECTORS SUBJECT TO BENCHMARK MONITORING—Continued

MSGP sector ¹	Industry sub-sector	Required parameters for benchmark monitoring
C	Industrial Inorganic Chemicals Plastics, Synthetic Resins, etc. Soaps, Detergents, Cosmetics, Perfumes Agricultural Chemicals	Aluminum, Iron, Nitrate + Nitrite N. Zinc. Nitrate + Nitrite N, Zinc. Nitrate + Nitrite N, Lead, Iron, Zinc, Phosphorus.
D	Asphalt Paving and Roofing Materials	TSS.
E	Clay Products	Aluminum.
F	Concrete Products Steel Works, Blast Furnaces, and Rolling and Finishing Mills. Iron and Steel Foundries Non-Ferrous Rolling and Drawing Non-Ferrous Foundries (Castings) Copper Ore Mining and Dressing	TSS, Iron. Aluminum, Zinc. Aluminum, TSS, Copper, Iron, Zinc. Copper, Zinc. Copper, Zinc. COD, TSS, Nitrate + Nitrite N
G ²	Coal Mines and Coal-Mining Related Facilities	TSS, Aluminum, Iron
H	Dimension Stone, Crushed Stone, and Nonmetallic Minerals (except fuels).	TSS.
J	Sand and Gravel Mining Hazardous Waste Treatment Storage or Disposal	Nitrate + Nitrite N, TSS. Ammonia, Magnesium, COD, Arsenic, Cadmium, Cyanide, Lead, Mercury, Selenium, Silver.
K	Landfills, Land Application Sites, and Open Dumps	Iron, TSS.
L	Automobile Salvage Yards	TSS, Aluminum, Iron, Lead.
M	Scrap Recycling	Copper, Aluminum, Iron, Lead, Zinc, TSS, COD.
N	Steam Electric Generating Facilities	Iron.
O	Water Transportation Facilities	Aluminum, Iron, Lead, Zinc.
Q	Airports with deicing activities ³	BOD, COD, Ammonia, pH.
S	Grain Mill Products	TSS.
U	Fats and Oils	BOD, COD, Nitrate + Nitrite N, TSS.
Y	Rubber Products	Zinc.
AA	Fabricated Metal Products Except Coating Fabricated Metal Coating and Engraving	Iron, Aluminum, Zinc, Nitrate + Nitrite N. Zinc, Nitrate + Nitrite N.

¹ Table does not include parameters for compliance monitoring under effluent limitations guidelines.

² See Sector G (Part 6.G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities.

³ Monitoring requirement is for airports with deicing activities that utilize more than 100 tons of urea or more than 100,000 gallons of ethylene glycol per year.

5.1.2.1 *Monitoring Periods for Benchmark Monitoring.* Unless otherwise specified in Part 6, benchmark monitoring periods are October 1, 2001 to September 30, 2002 (year two of the permit) and October 1, 2003 to September 30, 2004 (year four of the permit). If your facility falls within a Sector(s) required to conduct benchmark monitoring, you must monitor quarterly (4 times a year) during at least one, and potentially both, monitoring periods; unless otherwise specified in the sector-specific requirements of Part 6. Depending on the results of the 2001–2002 monitoring year, you may not be required to conduct benchmark monitoring in the 2003–2004 monitoring year (see Part 5.1.2.2).

5.1.2.2 *Benchmark Monitoring Year 2003–2004 Waivers for Facilities Testing Below Benchmark Values.* All of the provisions of Part 5.1.2.2 are available to permittees except as noted in Part 6. Waivers from benchmark monitoring are

available to facilities whose discharges are below benchmark values, thus there is an incentive for facilities to improve the effectiveness of their SWPPPs in eliminating discharges of pollutants and avoid the cost of monitoring.

On both a parameter by parameter and outfall by outfall basis, you are not required to conduct sector-specific benchmark monitoring in the 2003–2004 monitoring year provided:

- You collected samples for all four quarters of the 2001–2002 monitoring year and the average concentration was below the benchmark value in Part 6; and
- You are not subject to a numeric limitation or State/Tribal-specific monitoring requirement for that parameter established in Part 5.2 or Part 13; and
- You include a certification in the SWPPP that based on current potential pollutant sources and BMPs used, discharges from the facility are reasonably expected to be essentially the same (or cleaner) compared to when

the benchmark monitoring for the 2001–2002 monitoring year was done.

5.1.2.3 *Inactive and Unstaffed Sites.* If you are unable to conduct benchmark monitoring at an inactive and unstaffed site, you may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. If you exercise this waiver, you must maintain a certification with your Storm Water Pollution Prevention Plan stating that the site is inactive and unstaffed and that performing benchmark monitoring during a qualifying storm event is not feasible. You must sign and certify the waiver in accordance with Part 9.7.

5.1.3 Coal Pile Runoff

5.1.3.1 If your facility has discharges of storm water from coal storage piles, you must comply with the limitations and monitoring requirements of Table 5–2 for all discharges containing the coal pile runoff, regardless of your facility's sector of industrial activity.

TABLE 5-2.—NUMERIC LIMITATIONS FOR COAL PILE RUNOFF

Parameter	Limit	Monitoring frequency	Sample type
Total Suspended Solids (TSS)	50 mg/L, max	1/year	Grab.
pH	6.0–9.0 min. and max	1/year	Grab.

5.1.3.2 You must not dilute coal pile runoff with storm water or other flows in order to meet this limitation.

5.1.3.3 If your facility is designed, constructed and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

5.1.3.4 You must collect and analyze your samples in accordance with Part 5.2.2. Results of the testing must be retained and reported in accordance with Part 8 and 9.16.

5.1.4 Compliance Monitoring for Discharges Subject to Numerical Effluent Limitation Guidelines

Table 1–2 of Part 1.2.2.1.3 of the permit identifies storm water discharges subject to effluent limitation guidelines that are authorized for coverage under the permit. Facilities subject to storm water effluent limitation guidelines are required to monitor such discharges to evaluate compliance with numerical effluent limitations. Industry-specific numerical limitations and compliance monitoring requirements are described in Part 6 of the permit.

5.1.5 Monitoring for Limitations Required by a State or Tribe

Unless otherwise specified in Part 13 (state/tribal-specific permit conditions), you must sample once per year for any permit limit established as a result of a state or tribe's conditions for certification of this permit under CWA § 401.

5.2 Monitoring Instructions

5.2.1 Monitoring Periods

If you are required to conduct monitoring on an annual or quarterly basis, you must collect your samples within the following time periods (unless otherwise specified in Part 6):

- The monitoring year is from October 1 to September 30
- If your permit coverage was effective less than one month from the end of a quarterly or yearly monitoring period, your first monitoring period starts with the next respective monitoring period. (e.g., if permit coverage begins June 5th, you would not need to start quarterly sampling until the July–September quarter, but you

would only have from June 5th to September 30th to complete that year's annual monitoring)

5.2.2 Collection and Analysis of Samples

You must assess your sampling requirements on an outfall by outfall basis. You must collect and analyze your samples in accordance with the requirements of Part 9.16.

5.2.2.1 *When and How to Sample.* Take a minimum of one grab sample from the discharge associated with industrial activity resulting from a storm event with at least 0.1 inch of precipitation (defined as a "measurable" event), providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

Take the grab sample during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, sample during the first hour of discharge and describe why a grab sample during the first 30 minutes was impracticable. Submit this information on or with the discharge monitoring report (see Part 7.1). If the sampled discharge commingles with process or non-process water, attempt to sample the storm water discharge before it mixes with the non-storm water.

To get help with monitoring, consult the *Guidance Manual for the Monitoring and Reporting Requirements of the NPDES Storm Water Multi-Sector General Permit* which can be down loaded from the EPA Web Site at www.epa.gov/OWM/sw/industry/index.htm. It can also be ordered from the Office of Water Resource Center by calling 202–260–7786.

5.2.3 Storm Event Data

Along with the results of your monitoring, you must provide the date and duration (in hours) of the storm event(s) samples; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event samples and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of

the total volume (in gallons) of the discharge samples.

5.2.4 Representative Outfalls—Essential Identical Discharges

If your facility has two (2) or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials or storm water management practices occurring within the outfalls' drainage areas, you may test the effluent of just one of the outfalls and report that the quantitative data also applies to the substantially identical outfall(s). For this to be permissible, you must describe in the Storm Water Pollution Prevention Plan and include in the Discharge Monitoring Report the following: locations of the outfalls; why the outfalls are expected to discharge substantially identical effluents; estimates of the size of the drainage area (in square feet) for each of the outfalls; and an estimate of the runoff coefficient of the drainage areas (low: under 40 percent; medium: 40 to 65 percent; high: above 65 percent). Note: Page 107 of the *NPDES Storm Water Sampling Guidance Document* (EPA 800/B–92–001) lists criteria for substantially identical outfalls (available on EPA's web site at <http://www.epa.gov/owm/sw/industry/>).

5.3 General Monitoring Waivers

Unless specifically stated otherwise, the following waivers may be applied to any monitoring required under this permit.

5.3.1 Adverse Climatic Conditions Waiver

When adverse weather conditions prevent the collection of samples, take a substitute sample during a qualifying storm event in the next monitoring period, or four samples per monitoring year when weather conditions do not allow for samples to be spaced evenly during the year. Adverse conditions (i.e., those which are dangerous or create inaccessibility for personnel) may include such things as local flooding, high winds, electrical storms, or situations which otherwise make sampling impracticable such as drought or extended frozen conditions.

5.3.2 Alternative Certification of "Not Present or No Exposure"

You are not subject to the analytical monitoring requirements of Part 5.1.2 provided:

5.3.2.1 You make a certification for a given outfall, or on a pollutant-by-pollutant basis in lieu of monitoring required under Part 5.1.2, that material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, or significant materials from past industrial activity that are located in areas of the facility within the drainage area of the outfall are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period; and

5.3.2.2 Your certification is signed in accordance with Part 9.7, retained in the Storm Water Pollution Prevention Plan, and submitted to EPA in accordance with Part 7. In the case of certifying that a pollutant is not present, the permittee must submit the certification along with the monitoring reports required Part 7; and

5.3.2.3 If you cannot certify for an entire period, you must submit the date exposure was eliminated and any monitoring required up until that date; and

5.3.2.4 No numeric limitation or State-specific monitoring requirement for that parameter is established in Part 5 or Part 13.

5.4 Monitoring Required by the Director

The Director may provide written notice to any facility, including those otherwise exempt from the sampling requirements of Parts 5, 6 and 12, requiring discharge sampling for a specific monitoring frequency for specific parameters. Any such notice will briefly state the reasons for the monitoring, parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

5.5 Reporting Monitoring Results

Deadlines and procedures for submitting monitoring reports are contained in Part 7.

6. Sector-Specific Requirements for Industrial Activity

You only need to comply with the additional requirements of Part 6 that

apply to the sector(s) of industrial activity at your facility. These sector-specific requirements are in addition to the "basic" requirements specified in Parts 1–5 and 7–13 of this permit.

6.A Sector A—Timber Products

6.A.1 Covered Storm Water Discharges

The requirements in Part 6.A apply to storm water discharges associated with industrial activity from Timber Products facilities as identified by the SIC Codes specified under Sector A in Table 1–1 of Part 1.2.1.

6.A.2 Industrial Activities Covered by Sector A

The types of activities that permittees under Sector A are primarily engaged in are:

6.A.2.1 Cutting timber and pulpwood (those that have log storage or handling areas);

6.A.2.2 Mills, including merchant, lath, shingle, cooperage stock, planing, plywood and veneer;

6.A.2.3 Producing lumber and wood basic materials;

6.A.2.4 Wood preserving;

6.A.2.5 Manufacturing finished articles made entirely of wood or related materials except wood kitchen cabinet manufacturers (covered under Part 6.23);

6.A.2.6 Manufacturing wood buildings or mobile homes.

6.A.3 Special Coverage Conditions

6.A.3.1 *Prohibition of Discharges.* (See also Part 1.2.3.1) Not covered by this permit: storm water discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate NPDES permit.

6.A.3.2 *Authorized Non-Storm Water Discharges.* (See also Part 1.2.3.1) Also authorized by this permit, provided the non-storm water component of the discharge is in compliance with SWPPP requirements in Part 4.2.7 (Controls): discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray down waters and no chemicals are applied to the wood during storage.

6.A.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.A.4.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Also identify where any of the following may be exposed to precipitation/surface runoff: processing areas; treatment chemical storage areas; treated wood and residue storage areas; wet decking areas; dry decking areas; untreated wood and residue storage areas; and treatment equipment storage areas.

6.A.4.2 *Inventory of Exposed Materials.* (See also Part 4.2.4) Where such information exists, if your facility has used chlorophenolic, creosote or chromium-copper-arsenic formulations for wood surface protection or preserving, identify the following: areas where contaminated soils, treatment equipment and stored materials still remain, and the management practices employed to minimize the contact of these materials with storm water runoff.

6.A.4.3 *Description of Storm Water Management Controls.* (See also Part 4.2.7). Describe and implement measures to address the following activities/sources: log, lumber and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment/vehicle maintenance, storage and repair areas. If your facility performs wood surface protection/preservation activities, address the specific BMPs for these activities.

6.A.4.4 *Good Housekeeping.* (See also Part 4.2.7.2.1.1). In areas where storage, loading/unloading and material handling occur, perform good housekeeping to limit the discharge of wood debris; minimize the leachate generated from decaying wood materials; and minimize the generation of dust.

6.A.4.5 *Inspections.* (See also Part 4.2.7.2.1.5). If your facility performs wood surface protection/preservation activities, inspect processing areas, transport areas and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with storm water discharges.

6.A.5 Monitoring and Reporting Requirements (See also Part 5)

TABLE A-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

[Sector of permit affected/supplemental requirements]

Subsector (Discharge may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cutoff concentration ¹	Numeric limitation ²
General Sawmills and Planning Mills (SIC 2421)	Chemical Oxygen Demand (COD).	120.0 mg/L.	6.0–9.0 s.u. No Discharge of debris that will not pass through a 2.54 cm (1") diameter round opening.
	Total Suspended Solids (TSS).	100 mg/L.	
	Total Zinc	0.117 mg/L.	
Wood Preserving (SIC 2491)	Total Arsenic	0.16854 mg/L.	
	Total Copper	0.0636 mg/L.	
Log Storage and Handling (SIC 2411)	Total Suspended Solids (TSS).	100 mg/L.	
Wet Decking Discharges at Log Storage and Handling Areas (SIC 2411).	pH .....	.....
	Debris (woody material such as bark, twigs, branches, heartwood, or sapwood).	.....
Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC Codes 2426, 2429, 2431–2439 (except 2434), 2448, 2449, 2451, 2452, 2593, and 2499).	Chemical Oxygen Demand (COD).	120.0 mg/L.	
	Total Suspended Solids (TSS).	100.0 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

² Monitor once per year for each monitoring year.

6.B Sector B—Paper and Allied Products Manufacturing

6.B.1 Covered Storm Water Discharges

The requirements in Part 6.B apply to storm water discharges associated with industrial activity from Paper and Allied Products Manufacturing facilities as identified by the SIC Codes specified

under Sector B in Table 1–1 of Part 1.2.1.

6.B.2 Industrial Activities Covered by Sector B

The types of activities that permittees under Sector B are primarily engaged in are:

6.B.2.1 Manufacture of pulps from wood and other cellulose fibers and from rags;

6.B.2.2 Manufacture of paper and paperboard into converted products, *i.e.* paper coated off the paper machine, paper bags, paper boxes and envelopes;

6.B.2.3 Manufacture of bags of plastic film and sheet.

6.B.3 Monitoring and Reporting Requirements (See also Part 5)

TABLE B-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring and cutoff concentration ¹	Numeric limitation
Part of Permit Affected/Supplemental Requirements			
Paperboard Mills (SIC Code 2631)	COD	120.0 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 monitoring years

6.C Sector C—Chemical and Allied Products Manufacturing

6.C.1 Covered Storm Water Discharges

The requirements in Part 6.C apply to storm water discharges associated with industrial activity from Chemical and Allied Products Manufacturing facilities as identified by the SIC Codes specified under Sector C in Table 1–1 of Part 1.2.1.

6.C.2 Industrial Activities Covered by Sector C

The requirements listed under this Part apply to storm water discharges associated with industrial activity from a facility engaged in manufacturing the following products:

6.C.2.1 basic industrial inorganic chemicals;

6.C.2.2 plastic materials and synthetic resins, synthetic rubbers, and

cellulosic and other human made fibers, except glass;

6.C.2.3 soap and other detergents, including facilities producing glycerin from vegetable and animal fats and oils; speciality cleaning, polishing and sanitation preparations; surface active preparations used as emulsifiers, wetting agents and finishing agents, including sulfonated oils; and perfumes, cosmetics and other toilet preparations;

6.C.2.4 paints (in paste and ready mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers, and sealers; paint and varnish removers; paint brush cleaners; and allied paint producers;

6.C.2.5 industrial organic chemicals;

6.C.2.6 industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile and rubber cements from vegetable, animal or synthetic plastic materials; explosives; printing ink, including gravure, screen process and lithographic inks; miscellaneous chemical preparations such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry sours, writing and stamp pad ink, industrial compounds such as boiler and heat insulating compounds, and chemical supplies for foundries;

6.C.2.7 ink and paints, including china painting enamels, indian ink, drawing ink, platinum paints for burnt wood or leather work, paints for china painting, artists' paints and artists' water colors;

6.C.2.8 nitrogenous and phosphatic basic fertilizers, mixed fertilizers,

pesticides and other agricultural chemicals.

6.C.3 Limitations on Coverage

6.C.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.3) Not covered by this permit: non-storm water discharges containing inks, paints or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank or container rinsing and cleaning.

6.C.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.C.4.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Also identify where any of the following may be exposed to precipitation/surface runoff: processing and storage areas; access roads, rail cars and tracks; areas where substances are transferred in bulk; and operating machinery.

6.C.4.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe the

following sources and activities that have potential pollutants associated with them: loading, unloading and transfer of chemicals; outdoor storage of salt, pallets, coal, drums, containers, fuels, fueling stations; vehicle and equipment maintenance/cleaning areas; areas where the treatment, storage or disposal (on- or off-site) of waste/wastewater occur; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; areas where the transfer of substances in bulk occurs; and areas where machinery operates.

6.C.4.3 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1) As part of your good housekeeping program, include a schedule for regular pickup and disposal of garbage and waste materials, or adopt other appropriate measures to reduce the potential for discharging storm water that has contacted garbage or waste materials. Routinely inspect the condition of drums, tanks and containers for potential leaks.

6.C.5 Monitoring and Reporting Requirements (See also Part 5)

TABLE C-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation ²
Part of Permit Affected/Supplemental Requirements			
Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR §418.10)—applies to precipitation runoff, that during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products or waste product (SIC 2874).	Total Phosphorus (as P) ...		105.0 mg/L, daily max. 35 mg/L, 30-day avg.
	Fluoride		75.0 mg/L, daily max. 25.0 mg/L, 30-day avg.
Agricultural Chemicals (2873–2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L.	
	Total Recoverable Lead	0.0816 mg/L.	
	Total Recoverable Iron	1.0 mg/L.	
	Total Recoverable Zinc	0.117 mg/L.	
	Phosphorus	2.0 mg/L.	
Industrial Inorganic Chemicals (2812–2819)	Total Recoverable Aluminum	0.75 mg/L	Nitrate plus Nitrite Nitrogen
	Total Recoverable Iron.	1.0 mg/L	
Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841–2844).	Nitrate plus Nitrite Nitrogen	0.68 mg/L.	
Plastics, Synthetics, and Resins (SIC 2821–2824)	Total Recoverable Zinc	0.117 mg/L..	
	Total Recoverable Zinc	0.117 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

² Monitor once/year for each Monitoring Year.

6.D Sector D—Asphalt Paving and Roofing Materials and Lubricant Manufacturers

6.D.1 Covered Storm Water Discharges

The requirements in Part 6.D apply to storm water discharges associated with industrial activity from Asphalt Paving

and Roofing Materials and Lubricant Manufacturers facilities as identified by the SIC Codes specified under Sector D in Table 1–1 of Part 1.2.1.

6.D.2 Industrial Activities Covered by Sector D

The types of activities that permittees under Sector D are primarily engaged in are:

6.D.2.1 manufacturing asphalt paving and roofing materials;

6.D.2.2 portable asphalt plant facilities;

6.D.2.3 manufacturing lubricating oils and greases.

6.D.3 Limitations on Coverage

The following storm water discharges associated with industrial activity are not authorized by this permit:

6.D.3.1 discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products that are classified as SIC code 2911;

6.D.3.2 discharges from oil recycling facilities;

6.D.3.3 discharges associated with fats and oils rendering.

6.D.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.D.4.1 *Inspections.* (See also Part 4.2.7.2.1.5) Inspect at least once per month, as part of the maintenance

program, the following areas: Material storage and handling areas, liquid storage tanks, hoppers/silos, vehicle and equipment maintenance, cleaning and fueling areas, material handling vehicles, equipment and processing areas. Ensure appropriate action is taken in response to the inspection by implementing tracking or follow up procedures.

6.D.5 Monitoring and Reporting Requirements. (See also part 5)

TABLE D-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric Limitation ²
Sector of Permit Affected/Supplemental Requirements			
Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	100mg/L.	
Discharges from areas where production of asphalt paving and roofing emulsions occurs (SIC 2951, 2952).	TSS .....	.....	23.0 mg/L, daily max 15.0 mg/L 30-day avg.
	Oil and Grease .....	.....	15.0 mg/L daily max. 10mg/L, 30-day avg.
	pH .....	.....	6.0–9.0

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

² Monitor once per year for each monitoring year.

6.E Sector E—Glass, Clay, Cement, Concrete, and Gypsum Products

6.E.1 Covered Storm Water Discharges

The requirements in Part 6.E apply to storm water discharges associated with industrial activity from Glass, Clay, Cement, Concrete, and Gypsum Products facilities as identified by the SIC Codes specified under Sector E in Table 1–1 of part 1.2.1.

6.E.2 Industrial Activities Covered by Sector E

The requirements listed under this permit apply to storm water discharges associated with industrial activity from a facility engaged in either manufacturing the following products or performing the following activities:

- 6.E.2.1 flat, pressed, or blown glass or glass containers;
- 6.E.2.2 hydraulic cement;
- 6.E.2.3 clay products including tile and brick;
- 6.E.2.4 pottery and porcelain electrical supplies;
- 6.E.2.5 concrete products;
- 6.E.2.6 gypsum products;
- 6.E.2.7 minerals and earths, ground or otherwise treated;
- 6.E.2.8 non-clay refractories;
- 6.E.2.9 lime manufacturing
- 6.E.2.10 cut stone and stone products

6.E.2.11 asbestos products

6.E.2.12 mineral wool and mineral wool insulation products.

6.E.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.E.3.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier or other device used for the treatment of process wastewater, and the areas that drain to the treatment device.

6.E.3.2 *Good Housekeeping Measures.* (See also Part 4.2.2.3) With good housekeeping prevent or minimize the discharge of: spilled cement; aggregate (including sand or gravel); kiln dust; fly ash; settled dust; or other significant material in storm water from paved portions of the site that are exposed to storm water. Consider using regular sweeping or other equivalent measures to minimize the presence of these materials. Indicate in your SWPPP the frequency of sweeping or equivalent measures. Determine the frequency from the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be

performed at least once a week if cement, aggregate, kiln dust, fly ash or settled dust are being handled/processed. You must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to storm water where practicable, by storing these materials in enclosed silos/hoppers, buildings or under other covering.

6.E.3.3 *Inspections.* (See also Part 4.2.7.2.1.5) Perform inspections while the facility is in operation and include all of the following areas exposed to storm water: material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down/equipment cleaning areas.

6.E.3.4 *Certification.* (See also Part 4.4.1) For facilities producing ready-mix concrete, concrete block, brick or similar products, include in the non-storm water discharge certification a description of measures that insure that process waste water resulting from truck washing, mixers, transport buckets, forms or other equipment are discharged in accordance with NPDES requirements or are recycled.

6.E.4 Monitoring and Reporting Requirements. (See also Part 5)

TABLE E-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitaiton ²
Sector of Permit Affected/Supplemental Requirements			
Clay Product Manufacturers (SIC 3245–3259,3261–3269)	Total Recoverable Alu- minum.	0.75 mg/L	
Concrete and Gypsum Product Manufacturers (SIC 3271–3275).	TSS	100 mg/L	
Cement Manufacturing Facility, Material Storage Runoff: Any discharge composed of runoff that derives from the storage of materials including raw materials, inter- mediate products, finished products, and waste mate- rials that are used in or derived from the manufacture of cement.	Total Recoverable Iron	1.0 mg/L	
	Total Suspended Solids (TTS≤.	50 mg/L daily max..	
	pH		6.0–9.0 S.U.

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

² Monitor once per year for each monitoring year.

6.F Sector F—Primary Metals

6.F.1 Covered Storm Water Discharges

The requirements in Part 6.F apply to storm water discharges associated with industrial activity from Primary Metals facilities as identified by the SIC Codes specified under Sector F in Table 1–1 of Part 1.2.1.

6.F.2 Industrial Activities Covered by Sector F

The types of activities under this Part are facilities primarily engaged in are:

6.F.2.1 Steel works, blast furnaces, and rolling and finishing mills including: steel wire drawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel pipes and tubes;

6.F.2.2 Iron and steel foundries, including: gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified;

6.F.2.3 Primary smelting and refining of nonferrous metals, including: primary smelting and refining of copper, and primary production of aluminum;

6.F.2.4 Secondary smelting and refining of nonferrous metals;

6.F.2.5 Rolling, drawing, and extruding of nonferrous metals, including: rolling, drawing, and extruding of copper; rolling, drawing and extruding of nonferrous metals except copper and aluminum; and drawing and insulating of nonferrous wire;

6.F.2.6 Nonferrous foundries (castings), including: aluminum die-casting, nonferrous die-casting, except aluminum, aluminum foundries, copper foundries, and nonferrous foundries, except copper and aluminum;

6.F.2.7 Miscellaneous primary metal products, not elsewhere classified, including: metal heat treating, and

primary metal products not elsewhere classified;

Activities covered include but are not limited to storm water discharges associated with cooking operations, sintering plants, blast furnaces, smelting operations, rolling mills, casting operations, heat treating, extruding, drawing, or forging all types of ferrous and nonferrous metals, scrap and ore.

6.F.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.F.3.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Also identify where any of the following activities may be exposed to precipitation/surface runoff: storage or disposal of wastes such as spent solvents/baths, sand, slag/dross; liquid storage tanks/drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal/coke handling operations, etc., and which could result in a discharge of pollutants to waters of the United States.

6.F.3.2 *Inventory of Exposed Material.* (See also Part 4.2.4) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation/runoff, areas where deposition of particulate matter from process air emissions or losses during material handling activities are possible.

6.F.3.3 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1) As part of your good housekeeping program, include: a cleaning/

maintenance program for all impervious areas of the facility where particulate matter, dust or debris may accumulate, especially areas where material loading/unloading, storage, handling and processing occur; the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection or other equivalent measures that effectively trap or remove sediment.

6.F.3.4 *Inspections.* (See also Part 4.2.7.2.1.5) Conduct inspections routinely, or at least on a quarterly basis, and address all potential sources of pollutants, including (if applicable): air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers and cyclones) for any signs of degradation (e.g., leaks, corrosion or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets/outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes and vehicles) for leaks, drips or the potential loss of material; and material storage areas (e.g., piles, bins or hoppers for storing coke, coal, scrap or slag, as well as chemicals stored in tanks/drums) for signs of material losses due to wind or storm water runoff.

6.F.4 Monitoring and Reporting Requirements. (See also Part 5)

TABLE F-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Sector of permit affected/supplemental requirements—			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cutoff concentration ¹	Numeric limitation
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312–3317). Iron and Steel Foundries (SIC 3321–3325)	Total Recoverable Aluminum	0.75 mg/L	
	Total Recoverable Zinc	0.117 mg/L.	
	Total Recoverable Aluminum	0.75 mg/L.	
	Total Suspended Solids	100 mg/L	
	Total Recoverable Copper	0.0636 mg/L	
Rolling, Drawing, and Extruding of Non-Ferrous Metals (SIC 3351–3357).	Total Recoverable Iron	1.0 mg/L	
	Total Recoverable Zinc	0.117 mg/L.	
	Total Recoverable Copper	0.0636 mg/L	
Non-Ferrous Foundries (SIC 3363–3369)	Total Recoverable Zinc	0.117 mg/L.	
	Total Recoverable Copper	0.636 mg/L.	
	Total Recoverable Zinc	0.117 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.G Sector G—Metal Mining (Ore Mining and Dressing)

6.G.1 Covered Storm Water Discharges

The requirements in Part 6.G apply to storm water discharges associated with industrial activity from active, temporarily inactive and inactive metal mining and ore dressing facilities, including mines abandoned on Federal Lands, as identified by the SIC Codes specified under Sector G in Table 1–1 of Part 1.2.1. Coverage is required for facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

6.G.1.1 Covered Discharges from Inactive Facilities: All storm water discharges.

6.G.1.2 Covered Discharges from Active and Temporarily Inactive Facilities: Only the storm water discharges from the following areas are covered: waste rock/overburden piles if composed entirely of storm water and not combining with mine drainage; topsoil piles; offsite haul/access roads; onsite haul/access roads constructed of waste rock/overburden/spent ore if composed entirely of storm water and not combining with mine drainage; onsite haul/access roads not constructed of waste rock/overburden/spent ore except if mine drainage is used for dust control; runoff from tailings dams/dikes when not constructed of waste rock/tailings and no process fluids are present; runoff from tailings dams/dikes when constructed of waste rock/tailings if and no process fluids are present if composed entirely of storm water and not combining with mine drainage; concentration building if no contact with material piles; mill site if no

contact with material piles; office/administrative building and housing if mixed with storm water from industrial area; chemical storage area; docking facility if no excessive contact with waste product that would otherwise constitute mine drainage; explosive storage; fuel storage; vehicle/equipment maintenance area/building; parking areas (if necessary); power plant; truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active mining area; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially/inadequately reclaimed areas or areas not released from reclamation bonds.

6.G.2 Industrial Activities Covered by Sector G

Note: “metal mining” will connote any of the separate activities listed in Part 6.G.2. The types of activities that permittees under Sector G are primarily engaged in are:

6.G.2.1 exploring for metallic minerals (ores), developing mines and the mining of ores;

6.G.2.2 ore dressing and beneficiating, whether performed at co-located, dedicated mills or separate (*i.e.*, custom) mills.

6.G.3 Limitations on Coverage

6.G.3.1 Prohibition of Storm Water Discharges.

Storm water discharges not authorized by this permit: discharges from active metal mining facilities which are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

Note: discharges that come in contact with overburden/waste rock are subject to 40 CFR Part 440, providing: the discharges drain to a point source (either naturally or as a result of intentional diversion) and they combine with “mine drainage” that is otherwise

regulated under the Part 440 regulations. Discharges from overburden/waste rock can be covered under this permit if they are composed entirely of storm water, do not combine with sources of mine drainage that are subject to 40 CFR Part 440, and meet other eligibility criteria contained in Part 1.2.2.1.

6.G.3.2 Prohibition of Non-Storm Water Discharges.

Not authorized by this permit: adit drainage and contaminated springs or seeps (see also the standard Limitations on Coverage in Part 1.2.3).

6.G.4 Definitions

6.G.4.1 Mining Operation—typically consists of three phases, any one of which individually qualifies as a “mining activity.” The phases are the exploration and construction phase, the active phase, and the reclamation phase.

6.G.4.2 Exploration and Construction Phase—entails exploration and land disturbance activities to determine the financial viability of a site. Construction includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals.

6.G.4.3 Active Phase—activities including each step from extraction through production of a salable product.

6.G.4.4 Reclamation Phase—activities intended to return the land to its pre-mining use

The following definitions are not intended to supercede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

6.G.4.5 Active Metal Mining Facility—a place where work or other activity related to the extraction, removal or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun.

6.G.4.6 Inactive Metal Mining Facility—a site or portion of a site where metal mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal government agency.

6.G.4.7 Temporarily Inactive Metal Mining Facility—a site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal government agency.

6.G.5 Clearing, Grading and Excavation Activities

Clearing, grading and excavation activities being conducted as part of the exploration and construction phase of a mining operation cannot be covered under this permit if these activities will disturb one or more acre of land. Instead, coverage for these activities must be under the latest version of EPA's General Permit for Storm Water Discharges from Construction Activities (the "Construction General Permit," **Federal Register**, Vol. 63, p. 7858 and for Region 6, **Federal Register**, Vol. 63, p. 36490), or an individual construction permit. If the area of disturbance during the initial phase is less than one acre, you must continue to comply with the requirements of the MSGP-2000.

6.G.5.1 Requirements for Activities Disturbing 5 or More Acres of Earth. If the one-acre limit as defined in Part 6.G.5 is attained, coverage for these activities must be under the latest version of EPA's Construction General Permit (or individual permit). You must first obtain and comply with the Construction General Permit's requirements before submitting the separate Construction General Permit Notice of Intent (NOI) form (EPA Form 3510-9). The February 17, 1998 version of the permit can be downloaded from the EPA's Web Site at www.epa.gov/owm/sw/construction/cgp/cgp-nat.pdf and Region 6's July 6, 1998 version of the permit at www.epa.gov/owm/sw/construction/cgp/cgp-reg6.pdf or obtained from the Office of Water Resource Center at (202) 260-7786. The NOI form is also available from the Web Site at www.epa.gov/owm/sw/construction/connoi.pdf or from your EPA Regional office at the address listed under Part 8.3. Discharges in compliance with the provisions of the Construction General Permit are also authorized under the MSGP.

6.G.5.2 Cessation of Earth Disturbing Activities. If exploration phase clearing,

grading and excavation activities are completed and no further mining activities will occur at the site, you must comply with the requirements for terminating the Construction General Permit, *i.e.*, stabilize and revegetate the disturbed land, submit a Notice of Termination, etc. If active mining activities will ensue, you must apply for coverage under the MSGP-2000 for your storm water discharges and be prepared to implement any new requirements prior to beginning the active phase. It is recommended you terminate your coverage under the Construction General Permit, but it is not mandatory that you do so. If you choose not to terminate your construction General Permit, you will be responsible for complying with all permit conditions of the construction permit in addition to those of the MSGP-2000. The Notice of Termination form is Addendum E to this permit and is available at <http://www.epa.gov/owm/sw/industry/msgp/notform.pdf>.

6.G.6 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.G.6.1 SWPPP Requirements for Active and Temporarily Inactive Metal Mining Facilities.

6.G.6.1.1 Nature of Industrial Activities. (See also Part 4.2.2.1) Briefly describe the mining and associated activities that can potentially affect the storm water discharges covered by this permit, including: the total acreage within the mine site; the estimated acreage of disturbed land; the estimated acreage of land proposed to be disturbed throughout the life of the mine; and a general description of the location of the site relative to major transportation routes and communities.

6.G.6.1.2 Site Map. (See also Part 4.2.2.3) Also identify the locations of the following (as appropriate): mining/milling site boundaries; access and haul roads; outline of the drainage areas of each storm water outfall within the facility and indicate the types of discharges from the drainage areas; equipment storage, fueling and maintenance areas; materials handling areas; outdoor manufacturing, storage or material disposal areas; chemicals and explosives storage areas; overburden, materials, soils or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles/ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage/process water; surface waters; and boundary of tributary areas that are

subject to effluent limitations guidelines.

6.G.6.1.3 Potential Pollutant Sources. (See also Part 4.2.4) For each area of the mine/mill site where storm water discharges associated with industrial activities occur, identify the types of pollutants (*e.g.*, heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the ore and waste rock (*e.g.*, acid forming); toxicity and quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; vegetation of site (if any); history of significant leaks/spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock/overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update your SWPPP with this information.

6.G.6.1.4 Site Inspections. (See also Part 4.2.7.2.1.5) Inspect active mining sites at least monthly. Inspect temporarily inactive sites at least quarterly unless adverse weather conditions make the site inaccessible.

6.G.6.1.5 Employee Training. (See also Part 4.2.7.2.1.6) Conduct employee training at least annually at active mining and temporarily inactive sites.

6.G.6.1.6 Controls. (See also Part 4.2.7) Consider each of the following BMPs. The potential pollutants identified in Part 6.G.6.1.3 shall determine the priority and appropriateness of the BMPs selected. If you determine that one or more of these BMPs are not appropriate for your facility, explain why it is not appropriate. If BMPs are implemented or planned but are not listed here (*e.g.*, substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP.

6.G.6.1.6.1 Storm Water Diversions. Consider diverting storm water away from potential pollutant sources. BMP options: interceptor/diversion controls (*e.g.*, dikes, swales, curbs or berms); pipe slope drains; subsurface drains; conveyance systems (*e.g.*, channels or gutters, open top box culverts and waterbars; rolling dips and road sloping; roadway surface water deflector, and culverts); or their equivalents.

6.G.6.1.6.2 Sediment and Erosion Control. (See also Part 4.2.7.2.2.1) At active and temporarily inactive sites consider a range of erosion controls within the broad categories of: flow diversion (*e.g.*, swales); stabilization (*e.g.*, temporary or permanent seeding); and structural controls (*e.g.*, sediment traps, dikes, silt fences).

6.G.6.1.6.3 *Management of Runoff.* (See also Part 4.2.7.2.2.2) Consider the potential pollutant sources given in Part 6.G.6.1.3 when determining reasonable and appropriate measures for managing runoff.

6.G.6.1.6.4 *Capping.* When capping is necessary to minimize pollutant discharges in storm water, identify the source being capped and the material used to construct the cap.

6.G.6.1.6.5 *Treatment.* If treatment of storm water (e.g., chemical or physical systems, oil/water separators, artificial wetlands, etc.) from active and temporarily inactive sites is necessary to protect water quality, describe the type and location of treatment used.

6.G.6.1.6.6 *Certification of Discharge Testing.* (See also Part 4.4.1) Test or evaluate for the presence of specific mining-related non-storm water discharges such as seeps or adit discharges or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. Alternatively (if applicable), you may certify in your SWPPP that a particular discharge comprised of commingled storm water and non-storm water is covered under a separate NPDES permit; and that permit subjects the non-storm water portion to effluent limitations prior to any commingling. This certification shall identify the non-storm water discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-storm water discharge by the permit(s), and the points at which the limitations are applied.

6.G.6.2 SWPPP Requirements for Inactive Metal Mining Facilities.

6.G.6.2.1 *Nature of Industrial Activities.* (See also Part 4.2.2.1) Briefly describe the mining and associated activities that took place at the site that can potentially affect the storm water discharges covered by this permit. Include: approximate dates of operation; total acreage within the mine and/or processing site; estimate of acres of disturbed earth; activities currently occurring onsite (e.g., reclamation); a general description of site location with respect to transportation routes and communities.

6.G.6.2.2 *Site Map.* (See also Part 4.2.2.3) See Part 6.G.6.1.2 for requirements.

6.G.6.2.3 *Potential Pollutant Sources.* (See also Part 4.2.4) See Part 6.G.6.1.3 for requirements.

6.G.6.2.4 *Controls.* (See also Part 4.2.7) Consider each of the following BMPs. The potential pollutants identified in Part 6.G.6.2.3 shall determine the priority and appropriateness of the BMPs selected. If you determine that one or more of these BMPs are not appropriate for your facility, explain why it is not appropriate. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP. The non-structural controls in the general requirements at Part 4.2.7.2.1 are not required for inactive facilities.

6.G.6.2.4.1 *Storm Water Diversions.* See Part 6.G.6.1.6.2 for requirements.

6.G.6.2.4.2 *Sediment and Erosion Control.* (See also Part 4.2.7.2.2.1) See Part 6.G.6.1.6 for requirements.

6.G.6.2.4.3 *Management of Runoff.* (See also Part 4.2.7.2.2.2)

Also consider the potential pollutant sources as described in Part 6.G.6.2.3 (Summary of Potential Pollutant Sources) when determining reasonable and appropriate measures for managing runoff.

6.G.6.2.4.4 *Capping.* See Part 6.G.6.1.7 for requirements.

6.G.6.2.4.5 *Treatment.* See Part 6.G.6.1.8 for requirements.

6.G.6.2.5 *Comprehensive Site Compliance Evaluation.* (See also Part 4.9)

Annual site compliance evaluations may be impractical for inactive mining sites due to remote location/inaccessibility of the site; in which case conduct the evaluation at least once every 3 years. Document in the SWPPP why annual compliance evaluations are not possible. If the evaluations will be conducted more often than every 3 years, specify the frequency of evaluations.

6.G.7 Monitoring and Reporting Requirements. (See also Part 5)

6.G.7.1 *Analytic Monitoring for Copper Ore Mining and Dressing Facilities.* Active copper ore mining and dressing facilities must sample and analyze storm water discharges for the pollutants listed in Table G-1.

TABLE G-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING FOR COPPER ORE MINING AND DRESSING FACILITIES

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation
Part of Permit Affected/Supplemental Requirements			
Copper Ore Mining and Dressing Facilities (SIC 1021)	Total Suspended Solids (TSS). Nitrate plus Nitrite Nitrogen Chemical Oxygen Demand (COD).	100 mg/L. 0.68 mg/L. 120 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.G.7.2 *Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Ore Mining and Dressing Facilities.* For discharges from waste rock and overburden piles, perform analytic monitoring at least once within the first year of permit coverage for the parameters listed in Table G-2, and twice annually thereafter for any

parameters measured above the benchmark value (based on the initial sampling event) listed in Table G-2. Permittees must also conduct analytic monitoring twice annually for the parameters listed in Table G-3. The twice annual samples must be collected once between January 1 and June 30 and once between July 1 and December 31, with at least 3 months separating the

storm events. The director may, however, notify you that you must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from your waste rock/overburden piles. Monitoring requirements for discharges from waste rock and overburden piles are not eligible for the waivers in Part 5.3.2.

TABLE G-2.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING FOR DISCHARGES FROM WASTE ROCK AND OVERBURDEN PILES FROM ACTIVE ORE MINING OR DRESSING FACILITIES

Part of permit affected/supplemental requirements—			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cutoff concentration ¹	Numeric limitation
Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores Except Vanadium; Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099). See above, as applicable	Total Suspended Solids (TSS)	100 mg/L.	
	Turbidity (NTUs)	5 NTUs above background.	
	pH	6.0–9.0 standard units.	
	Hardness (as CaCO ₃)	no benchmark value.	
	Antimony, Total	0.636 mg/L.	
	Arsenic, Total	0.16854 mg/L.	
	Beryllium, Total	0.13 mg/L.	
	Cadmium, Total (hardness dependent)	0.0159 mg/L.	
	Copper, Total (hardness dependent)	0.0636 mg/L.	
	Iron, Total	1.0 mg/L.	
	Lead, Total (hardness dependent)	0.0816 mg/L.	
	Manganese, Total	1.0 mg/L.	
	Mercury, Total	0.0024 mg/L.	
	Nickel, Total (hardness dependent)	1.417 mg/L.	
	Selenium, Total	0.2385 mg/L.	
Silver, Total (hardness dependent)	0.318 mg/L.		
Zinc, Total (hardness dependent)	0.117 mg/L.		

¹ Monitor at least once during the first year of permit coverage, and twice annually thereafter for any parameter that exceeds the benchmark value. Facilities that monitored for the full list of Table G-2 parameters during the previous permit need not sample the entire list again, however they must continue twice annual monitoring for parameters that exceeded the benchmark values in the initial sampling event.

6.G.7.2.1 Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles. Table G-3 contains additional monitoring requirements for specific ore

mine categories. Perform the monitoring twice annually using the schedule established in Part 6.G.7.2. The initial sampling event for a pollutant

parameter required in Table G-2 satisfies the requirement for the first sample of any pollutant measurement in Table G-3.

TABLE G-3.—ADDITIONAL MONITORING REQUIREMENTS FOR DISCHARGES FROM WASTE ROCK AND OVERBURDEN PILES FROM ACTIVE ORE MINING OR DRESSING FACILITIES

Type of Ore mined	Supplemental requirements—		
	Pollutants of concern		
	Total suspended solids (TSS)	pH	Metals, total
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Aluminum Ore	X	X	Iron.
Mercury Ore	X	X	Nickel (H).
Iron Ore	X	X	Iron (Dissolved).
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H).
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H).
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Zinc (H).
Copper, Lead, Zinc, Gold, Silver and Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead, Mercury, Zinc (H).
Uranium, Radium and Vanadium	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H).

Note: (H) indicates that hardness must also be measured when this pollutant is measured.

6.G.7.2.2 Reporting Requirements Storm Water Discharges From Waste Rock And Overburden Piles From Active Ore Mining or Dressing Facilities. From active ore mining and dressing facilities,

submit monitoring results for each outfall discharging storm water from waste rock and overburden piles, or certifications in accordance with Part 7. Submit monitoring reports on discharge

monitoring report (DMR) forms postmarked no later than January 28 of the next year after the samples were collected.

TABLE G-4.—APPLICABILITY OF THE MULTI-SECTOR GENERAL PERMIT TO STORM WATER RUNOFF FROM ACTIVE ORE (METAL) MINING AND DRESSING SITES

Discharge/source of discharge	Note/comment
Piles	
Waste rock/overburden	If composed entirely of storm water and not combining with mine drainage. See Note below.
Topsoil	
Roads constructed of waste rock or spent ore	
Onsite haul roads	If composed entirely of storm water and not combining with mine drainage. See Note below.
Offsite haul/access roads	
Roads not constructed of waste rock or spent ore	
Onsite haul roads	Except if "mine drainage" is used for dust control.
Offsite haul/access roads	
Milling/concentrating	
Runoff from tailings dams/dikes when constructed of waste rock/tailings	Except if process fluids are present and only if composed entirely of storm water and not combining with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock/tailings	
Concentration building	Except if process fluids are present.
Mill site	If storm water only and no contact with piles.
Ancillary areas	
Office/administrative building and housing	If mixed with storm water from the industrial area.
Chemical storage area	
Docking facility	Except if excessive contact with waste product that would otherwise constitute "mine drainage".
Explosive storage	
Fuel storage (oil tanks/coal piles)	
Vehicle/equipment maintenance area/building	
Parking areas	But coverage unnecessary if only employee and visitor-type parking.
Power plant	Except when excessive contact with waste product that would otherwise constitute "mine drainage".
Truck wash area	
Reclamation-related areas	
Any disturbed area (unreclaimed)	Only if not in active mining area.
Reclaimed areas released from reclamation bonds prior to Dec. 17 1990.	
Partially/inadequately reclaimed areas or areas not released from reclamation bond.	

Note: Storm water runoff from these sources are subject to the NPDES program for storm water unless mixed with discharges subject to the 40 CFR Part 440 that are not regulated by another permit prior to mixing. Non-storm water discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440.

Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless: (1) it drains naturally (or is intentionally diverted) to a point source; and (2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of storm water does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in Part I.B. of the permit. Permit applicants bear the initial responsibility for determining the applicable technology-based standard for such discharges. EPA recommends that permit applicants contact the relevant NPDES permit issuance authority for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

6.H Sector H—Coal Mines and Coal Mining Related Facilities

6.H.1 Covered Storm Water Discharges

The requirements in Part 6.H apply to storm water discharges associated with industrial activity from Coal Mines and Coal Mining Related facilities as identified by the SIC Codes specified under Sector H in Table 1–1 of Part 1.2.1.

6.H.2 Industrial Activities Covered by Sector H

Storm water discharges from the following portions of coal mines may be eligible for this permit:

- 6.H.2.1 Haul roads (nonpublic roads on which coal or coal refuse is conveyed);
- 6.H.2.2 Access roads (nonpublic roads providing light vehicular traffic within the facility property and to public roadways);
- 6.H.2.3 Railroad spurs, siding and internal haulage lines (rail lines used for hauling coal within the facility property and to offsite commercial railroad lines or loading areas);
- 6.H.2.4 Conveyor belts, chutes and aerial tramway haulage areas (areas under and around coal or refuse conveyor areas, including transfer stations); and
- 6.H.2.5 Equipment storage and maintenance yards, coal handling buildings and structures, and inactive coal mines and related areas (abandoned and other inactive mines, refuse disposal sites and other mining-related areas).

6.H.3 Limitation on Coverage

6.H.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.2.2) Not covered by this permit: discharges from pollutant seeps or underground drainage from inactive coal mines and refuse disposal areas that do not result from precipitation events; and discharges from floor drains in maintenance buildings and other similar

drains in mining and preparation plant areas.

6.H.3.2 *Discharges Subject to Storm Water Effluent Guidelines.* (See also Part 1.2.3.4) Not authorized by this permit: storm water discharges subject to an existing effluent limitation guideline at 40 CFR Part 434.

6.H.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4 of the MSGP.

6.H.4.1 *Other Applicable Regulations.* Most active coal mining-related areas (SIC Codes 1221–1241) are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation Act (SMCRA). OSM has granted authority to most coal producing states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of storm water-related pollutant discharges must be addressed in the SWPPP (directly or by reference).

6.H.4.2 *Drainage Area Site Map.* (See also Part 4.2.2.3) Also identify where any of the following may be exposed to precipitation/surface runoff: all applicable mining related areas described in Part 6.H.2; acidic spoil, refuse or unreclaimed disturbed areas, and liquid storage tanks containing pollutants such as caustics, hydraulic fluids and lubricants.

6.H.4.3 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe the following sources and activities that have potential pollutants associated with them: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid or other potential harmful liquids; and loading or temporary storage of acidic refuse/spoil.

6.H.4.4 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1) As part of your good housekeeping program, consider: using sweepers; covered storage; watering haul roads to minimize dust generation; and conserving vegetation (where possible) to minimize erosion.

6.H.4.5 *Preventive Maintenance.* (See also Part 4.2.7.2.1.3) Also perform inspections of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid or slurry to prevent leaks due to deterioration or faulty connections; or other equivalent measures.

6.H.4.6 *Inspections of Active Mining-Related Areas and Inactive Areas Under SMCRA Bond Authority.* (See also Part 4.2.7.2.1.5) Perform quarterly inspections of areas covered by this permit, corresponding with the inspections, as performed by SMCRA inspectors, of all mining-related areas required by SMCRA. Also maintain the records of the SMCRA authority representative.

6.H.4.7 *Sediment and Erosion Control.* (See also Part 4.2.7.2.2.1) As indicated in Part 6.H.4.1 above, SMCRA requirements regarding sediment and erosion control measures are primary requirements of the SWPPP for mining-related areas subject to SMCRA authority.

6.H.4.8 *Comprehensive Site Compliance Evaluation.* (See also Part 4.9.2) Include in your evaluation program, inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected: haul and access roads; railroad spurs, sliding and internal hauling lines; conveyor belts, chutes and aerial tramways; equipment storage and maintenance yards; coal handling buildings/structures; and inactive mines and related areas.

6.H.6 Monitoring and Reporting Requirements. (See also Part 5)

TABLE H–1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cutoff concentration ¹	Numeric limitation
Part of Permit Affected/Supplemental Requirements			
Coal Mines and Related Areas	Total Recoverable Aluminum	0.75 mg/L.	
(SIC 1221–1241)	Total Recoverable Iron	1.0 mg/L.	
	Total Suspended Solids	100 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.I Sector I—Oil and Gas Extraction and Refining

6.I.1 Covered Storm Water Discharges

The requirements in Part 6.I apply to storm water discharges associated with industrial activity from Oil and Gas Extraction and Refining facilities as identified by the SIC Codes specified under Sector I in Table 1–1 of Part 1.2.1.

6.I.2 Industrial Activities Covered By Sector I

The types of activities that permittees under Sector I are primarily engaged in are:

6.I.2.1 Oil and gas exploration, production, processing or treatment operations, or transmission facilities;

6.I.2.2 Extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply and repair industries.

6.I.3 Limitations On Coverage

6.I.3.1 *Prohibition of Storm Water Discharges.* This permit does not authorize contaminated storm water discharges from petroleum refining or drilling operations that are subject to nationally established BAT or BPT guidelines found at 40 CFR Parts 419 and 435, respectively. Note: most contaminated discharges at petroleum refining and drilling facilities are subject to these effluent guidelines and are not eligible for coverage by this permit.

6.I.3.2 *Prohibition of Non-Storm Water Discharges.* Not authorized by this permit: discharges of vehicle and equipment washwater, including tank cleaning operations.

Alternatively, washwater discharges must be authorized under a separate NPDES permit, or be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

6.I.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.I.4.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: Reportable Quantity (RQ) releases; locations used for the treatment, storage or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for “No Discharge” in accordance with 40 CFR 435.32; and the

structural controls to achieve compliance with the “No Discharge” requirements.

6.I.4.2 *Potential Pollutant Sources.* (See also Part 4.2.4)

Also describe the following sources and activities that have potential pollutants associated with them: chemical, cement, mud or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the RQ release that triggered the permit application requirements; the nature of release (e.g., spill of oil from a drum storage area); the amount of oil or hazardous substance released; amount of substance recovered; date of the release; cause of the release (e.g., poor handling techniques and lack of containment in the area); areas affected by the release (i.e., land and water); procedure to clean up release; actions or procedures implemented to prevent or improve response to a release; and remaining potential contamination of storm water from release (taking into account human health risks, the control of drinking water intakes and the designated uses of the receiving water).

6.I.4.3 *Inspections.* (See also Part 4.2.7.2.1.5)

6.I.4.3.1 *Inspection Frequency.* Inspect all equipment and areas addressed in the SWPPP at a minimum of 6-month intervals. Routinely (but not less than quarterly) inspect equipment and vehicles which store, mix (including all on and offsite mixing tanks) or transport chemicals/hazardous materials (including those transporting supplies to oil field activities).

6.I.4.3.2 *Temporarily or Permanently Inactive Oil and Gas Extraction Facilities.* For these facilities that are remotely located and unstaffed, perform the inspections at least annually.

6.I.4.4 *Sediment and Erosion Control.* (See also Part 4.2.7.2.2.1) Unless covered by the General Permit for Construction Activity, the additional sediment and erosion control requirements for well drillings, and sand/shale mining areas include the following:

6.I.4.4.1 *Site Description:* Also include: a description of the nature of the exploration activity; estimates of the total area of site and area disturbed due to exploration activity; an estimate of runoff coefficient of the site; site drainage map, including approximate slopes; and the name of all receiving waters. All sediment and erosion control measures must be inspected once every seven days.

6.I.4.4.2 *Vegetative Controls:* Describe and implement vegetative practices designed to preserve existing vegetation where attainable and re-vegetate open areas as soon as practicable after grade drilling. Consider the following (or equivalent measures): temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

6.I.4.5 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1)

6.I.4.5.1 *Vehicle and Equipment Storage Areas.* Confine vehicles/equipment awaiting or having undergone maintenance to designated areas (as marked on site map). Describe and implement measures to minimize contaminants from these areas (e.g., drip pans under equipment, indoor storage, use of berms or dikes, or other equivalent measures).

6.I.4.5.2 *Material and Chemical Storage Areas.* Maintain these areas in good conditions to prevent contamination of storm water. Plainly label all hazardous materials.

6.I.4.5.3 *Chemical Mixing Areas.* (See also Part 4.4)

Describe and implement measures that prevent or minimize contamination of storm water runoff from chemical mixing areas.

6.J Sector J—Mineral Mining and Dressing

6.J.1 Covered Storm Water Discharges

The requirements in Part 6.J apply to storm water discharges associated with industrial activity from active and inactive mineral mining and dressing facilities as identified by the SIC Codes specified under Sector J in Table 1–1 of Part 1.2.1.

6.J.2 Industrial Activities Covered by Sector J

The types of activities that permittees under Sector J are primarily engaged in are:

6.J.2.1 exploring for minerals (e.g., stone, sand, clay, chemical and fertilizer minerals, non-metallic minerals, etc.), developing mines and the mining of minerals; and

6.J.2.2 mineral dressing, and non-metallic mineral services.

6.J.3 Limitations on Coverage

Not authorized by this permit: most storm water discharges subject to an existing effluent limitation guideline at 40 CFR part 436. The exceptions to this limitation and which are therefore covered by the MSGP–2000 are mine

dewatering discharges composed entirely of storm water or ground water seepage from: construction sand and gravel, industrial sand, and crushed stone mining facilities in Regions 1, 2, 3, 6, 8, 9, and 10.

6.J.4 Definitions

6.J.4.1 Mining Operation—typically consists of three-phases, any one of which individually qualifies as a "mining activity." The phases are the exploration and construction phase, the active phase and the reclamation phase.

6.J.4.2 Exploration and Construction Phase—entails exploration and land disturbance activities to determine the financial viability of a site. Construction includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals.

6.J.4.3 Active Phase—activities including each step from extraction through production of a salable product.

6.J.4.4 Reclamation phase—activities intended to return the land to its pre-mining state.

Note: The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

6.J.4.5 Active Mineral Mining Facility—a place where work or other activity related to the extraction, removal or recovery of minerals is being conducted. This definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun.

6.J.4.6 Inactive Mineral Mining Facility—a site or portion of a site where mineral mining and/or dressing occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active permit issued by the applicable State or Federal government agency.

6.J.4.7 Temporarily Inactive Mineral Mining Facility—a site or portion of a site where mineral mining and/or dressing occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by

the applicable State or Federal government agency.

6.J.5 Clearing, Grading and Excavation Activities

Clearing, grading and excavation activities being conducted as part of the exploration and construction phase of a mineral mining operation cannot be covered under this permit if these activities will disturb one or more acre of land. Instead, coverage for these activities must be under the latest version of EPA's General Permit for Storm Water Discharges from Construction Activities (the "Construction General Permit;" **Federal Register**, Vol. 63, p. 7858) and, for Region 6, **Federal Register**, Vol. 63, p. 36490), or an individual construction permit. If the area of disturbance during the initial phase is less than one acre, you must continue to comply with the requirements of the MSGP-2000.

6.J.5.1 Obtaining Coverage Under the Construction General Permit. If the one-acre limit as described in Part 6.J.5 is attained, coverage for these activities must be under the latest version of EPA's Construction General Permit (or individual permit). You must first obtain and comply with the Construction General Permit's requirements before submitting the separate Construction General Permit Notice of Intent (NOI) form (EPA Form 3510-9). The February 17, 1998 version of the permit can be downloaded from the EPA's Web Site at <http://www.epa.gov/owm/sw/construction/cgp/cgp-nat.pdf> or obtained from the Office of Water Resource Center at (202) 260-7786. The NOI form is also available from the Web Site at <http://www.epa.gov/owm/sw/construction/connoi.pdf> or from your EPA Regional office at the address listed under Part 8.3. Discharges in compliance with the provisions of the Construction General Permit are also authorized under the MSGP.

6.J.5.2 Cessation of Exploration and Construction Activities. If exploration

phase clearing, grading and excavation activities are completed and no further mining activities will occur at the site, you must comply with the requirements for terminating the Construction General Permit, *i.e.*, stabilize and revegetate the disturbed land, submit a Notice of Termination, etc. If active mining operations will ensue, you must apply for coverage under the MSGP-2000 for your storm water discharges and be prepared to implement any new requirements prior to beginning the active phase. It is recommended you terminate your coverage under the construction general permit, but you are not required to do so. If you choose to not terminate, you will be responsible for complying with all permit conditions of the construction permit in addition to those of the MSGP-2000. The Notice of Termination form is available in Addendum F to this permit and at <http://www.epa.gov/owm/sw/industry/msgp/notform.pdf>.

6.J.6 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4 of the MSGP.

6.J.6.1 Inspections. (See also Part 4.2.7.2.1.5) Conduct quarterly visual inspections of all BMPs at active mining facilities. At temporarily or permanently inactive facilities, perform annual inspections. Include in your inspection program: assessment of the integrity of storm water discharge diversions, conveyance systems, sediment control and collection systems and containment structures; inspections to determine if soil erosion has occurred at, or as a result of vegetative BMPs, serrated slopes and benched slopes; inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential discharges of contaminated storm water.

6.J.7 Monitoring and Reporting Requirements. (See also Part 5)

TABLE J-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation ²
Part of Permit Affected/Supplemental Requirements			
Mine Dewatering Activities at Construction Sand and Gravel; Industrial Sand; and Crushed Stone Mining Facilities (SIC 1422-1429, 1442, 1446).	Total Suspended Solids ....	.....	25 mg/L, monthly avg. 45 mg/L, daily max 6.0-9.0
	pH .....	.....
Sand and Gravel Mining (SIC 1442, 1446)	Nitrate plus Nitrogen	0.68 mg/L.	
	Total Suspended Solids	100 mg/L.	

TABLE J-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING—Continued

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation ²
Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499).	Total Suspended Solids	100 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

² Monitor once/year for Each Monitoring Year.

6.K Sector K—Hazardous Waste Treatment, Storage or Disposal Facilities

6.K.1 Covered Storm Water Discharges

The requirements in Part 6.K apply to storm water discharges associated with industrial activity from Hazardous Waste Treatment, Storage or Disposal facilities as identified by the Activity Code specified under Sector K in Table 1-1 of Part 1.2.1.

6.K.2 Industrial Activities Covered by Sector K

This permit authorizes storm water discharges associated with industrial activity from facilities that treat, store or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA.

6.K.3 Limitations on Coverage

For facilities located in Region 6, coverage is limited to Hazardous Waste Treatment Storage or Disposal Facilities (TSDF's) that are self-generating or handle residential wastes only and to those facilities that only store hazardous wastes and do not treat or dispose. Those permits are issued by EPA Region 6 for Louisiana (LAR05*###), New Mexico (NMR05*###), Oklahoma (OKR05*###), and Federal Indian Reservations in these States (LAR05*##F, NMR05*##F, OKR05*##F, or TXR05*##F). Coverage under this permit is not available to commercial hazardous waste disposal/treatment facilities located in Region 6 that dispose and treat on a commercial basis any produced hazardous wastes (not their own) as a service to generators.

6.K.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.1) Not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water,

laboratory-derived wastewater and contact washwater from washing truck and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility.

6.K.4 Definitions

6.K.4.1 *Contaminated storm water*—storm water which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 6.K.4.5. Some specific areas of a landfill that may produce contaminated storm water include (but are not limited to): the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas.

6.K.4.2 *Drained free liquids*—aqueous wastes drained from waste containers (e.g., drums, etc.) prior to landfilling.

6.K.4.3 *Land treatment facility*—a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

6.K.4.4 *Landfill*—an area of land or an excavation in which wastes are placed for permanent disposal, that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, a salt bed formation, an underground mine or a cave as these terms are defined in 40 CFR 257.2, 258.2 and 260.10.

6.K.4.5 *Landfill wastewater*—as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and

wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment, and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility.

6.K.4.6 *Leachate*—liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

6.K.4.7 *Non-contaminated storm water*—storm water which does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 6.K.4.5. Non-contaminated storm water includes storm water which flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

6.K.4.8 *Pile*—any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

6.K.4.9 *Surface impoundment*—a facility or part of a facility which is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds and lagoons.

6.K.5 Numeric Limitations, Monitoring and Reporting Requirements. (See also Part 5)

TABLE K-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK AND COMPLIANCE MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation ²
Part of Permit Affected/Supplemental Requirements			
ALL—Industrial Activity Code "HZ" (Note: permit coverage limited in some States)	Ammonia	19.0 mg/L	
	Total Recoverable Magnesium.	0.0636 mg/L	
	Chemical Oxygen Demand (COD).	120.0 mg/L	
	Total Recoverable Arsenic	0.16854 mg/L	
	Total Recoverable Cadmium.	0.0159 mg/L	
	Total Cyanide	0.0636 mg/L	
	Total Recoverable Lead	0.0816 mg/L	
	Total Recoverable Mercury	0.0024 mg/L	
	Total Recoverable Selenium.	0.2385 mg/L	
	Total Recoverable Silver ...	0.0318 mg/L	
ALL—Industrial Activity Code "HZ" Subject to the Provisions of 40 CFR Part 445 Subpart A.	BOD5		220 mg/l, daily max. 56 mg/l, monthly avg. maximum.
	TSS		88 mg/l, daily max. 27 mg/l, monthly avg. maximum.
	Ammonia		10 mg/l, daily maximum. 4.9 mg/l, monthly avg. maximum.
	Alpha Terpineol		0.042 mg/l, daily max. 0.019 mg/l, monthly avg. maximum.
	Aniline		0.024 mg/l, daily max. 0.015 mg/l, monthly avg. maximum.
	Benzoic Acid		0.119 mg/l, daily max. 0.073 mg/l, monthly avg. maximum.
	Naphthalene		0.059 mg/l, daily max. 0.022 mg/l, monthly avg. maximum.
	p-Cresol		0.024 mg/l, daily max. 0.015 mg/l, monthly avg. maximum.
	Phenol		0.048 mg/l, daily max. 0.029 mg/l, monthly avg. maximum.
	Pyridine		0.072 mg/l, daily max. 0.025 mg/l, monthly avg. maximum.
	Arsenic (Total)		1.1 mg/l, daily maximum. 0.54 mg/l, monthly avg. maximum.
	Chromium (Total)		1.1 mg/l, daily maximum. 0.46 mg/l, monthly avg. maximum.
	Zinc (Total)		0.535 mg/l, daily max. 0.296 mg/l, monthly avg. maximum.
	pH		Within the range of 6–9 pH units.

¹ These benchmark monitoring cutoff concentrations apply to storm water discharges associated with industrial activity other than contaminated storm water discharges from landfills subject to the numeric effluent limitations set forth in Table K-1. Monitor once/quarter for the year 2 and year 4 monitoring years.

² As set forth at 40 CFR Part 445 Subpart A, these numeric limitations apply to contaminated storm water discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N) except for any of the facilities described below:

(a) Landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) Landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

For the discharges subject to the numeric effluent limitations, monitoring for the specified parameters is required once/year during each year of the term of the permit.

6.L Sector L—Landfills, Land Application Sites and Open Dumps

6.L.1 Covered Storm Water Discharges

The requirements in Part 6.L apply to storm water discharges associated with industrial activity from Landfills and Land Application Sites and Open Dumps as identified by the Activity Codes specified under Sector L in Table 1-1 of Part 1.2.1.

6.L.2 Industrial Activities Covered by Sector L

This permit may authorize storm water discharges for Sector L facilities associated with waste disposal at landfills, land application sites and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA.

6.L.3 Limitations on Coverage

6.L.3.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.3.1)

Not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility.

6.L.4 Definitions

6.L.4.1 Contaminated storm water—storm water which comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some specific areas of a landfill that may produce contaminated storm water include (but are not limited to): the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment or machinery that has been in direct contact with the waste; and waste dumping areas.

6.L.4.2 Drained free liquids—aqueous wastes drained from waste containers (e.g., drums, etc.) prior to landfilling.

6.L.4.3 Landfill wastewater—as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater

associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water and contact washwater from washing truck, equipment and railcar exteriors and surface areas which have come in direct contact with solid waste at the landfill facility.

6.L.4.4 Leachate—liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such waste.

6.L.4.5 Non-contaminated storm water—storm water which does not come in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated storm water includes storm water which flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

6.L.5 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.L.5.1 Drainage Area Site Map. (See also Part 4.2.2.3)

Identify where any of the following may be exposed to precipitation/surface runoff: Active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, leachate collection and handling systems.

6.L.5.2 Summary of Potential Pollutant Sources. (See also Part 4.2.4)

Describe the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide and pesticide application; earth/soil moving; waste hauling and loading/unloading; outdoor storage of significant materials including daily, interim and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows;

failure or leaks from leachate collection and treatment systems.

6.L.5.3 Good Housekeeping Measures. (See also Part 4.2.7.2.1.1)

As part of your good housekeeping program, consider providing protected storage areas for pesticides, herbicides, fertilizer and other significant materials.

6.L.5.4 Preventative Maintenance Program. (See also Part 4.2.7.1)

As part of your preventative maintenance program, maintain: all containers used for outdoor chemical/significant materials storage to prevent leaking; all elements of leachate collection and treatment systems to prevent commingling of leachate with storm water; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary to minimize the effects of settlement, sinking and erosion).

6.L.5.5 Inspections.

6.L.5.5.1 Inspections of Active Sites. (See also Part 4.2.7.2.1.5) Inspect operating landfills, open dumps and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized, active land application areas, areas used for storage of material/wastes that are exposed to precipitation, stabilization and structural control measures, leachate collection and treatment systems, and locations where equipment and waste trucks enter/exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is seasonally arid (annual rainfall averages from 0 to 10 inches) or semi-arid (annual rainfall averages from 10 to 20 inches), conduct inspections at least once every month.

6.L.5.5.2 Inspections of Inactive Sites. (See also Part 4.2.7.2.1.5) Inspect inactive landfills, open dumps and land application sites at least quarterly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures and leachate collection and treatment systems, and all closed land application areas.

6.L.5.6 Recordkeeping and Internal Reporting. Implement a tracking system for the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track

the types and quantities of wastes applied in specific areas.

6.L.5.7 *Non-Storm Water Discharge Test Certification.* (See also Part 4.) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

6.L.5.8 *Sediment and Erosion Control Plan.* (See also Part 4.2.7.2.2.1) Provide temporary stabilization (e.g., consider temporary seeding, mulching

and placing geotextiles on the inactive portions of stockpiles); for materials stockpiled for daily, intermediate and final cover; for inactive areas of the landfill or open dump; for any landfill or open dump area that have gotten final covers but where vegetation has yet to established itself; and where waste application has been completed at land application sites but final vegetation has not yet been established.

6.L.5.9 *Comprehensive Site Compliance Evaluation.* (See also Part 4.9.2) Evaluate areas contributing to a storm water discharge associated with industrial activities at landfills, open dumps and land application sites for evidence of, or the potential for, pollutants entering the drainage system.

6.L.6 Numeric Limitations, Monitoring and Reporting Requirements. (See also Part 5)

TABLE L-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK AND COMPLIANCE MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cutoff concentration ¹	Numeric limitation ²
Section of Permit Affected/Supplemental Requirements			
All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code "LF").	Total Suspended Solids (TSS).	100 mg/L.	
All Landfill, Land Application Sites and Open Dumps, Except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code "LF").	Total Recoverable Iron	1.0mg/L.	
All Landfills Which are Subject to the Requirements of 40 CFR Part 445 Subpart B (Industrial Activity Code "LF").	BOD5 .....	.....	140 mg/1, daily max. 37 mg/1, monthly ave maximum
	TSS .....	.....	88 mg/l, daily max. 27 mg/1, monthly ave maximum.
	Ammonia .....	.....	10 mg/1, daily max. 4.9 mg/1, monthly ave maximum.
	Alpha Terpineol .....	.....	0.033 mg/1, daily max. 0.016 mg/1, monthly ave maximum.
	Benzoic Acid .....	.....	0.12 mg/1, daily max. 0.071 mg/1, monthly ave maximum.
	p-Cresol .....	.....	0.025 mg/1, daily max. 0.014 mg/1, monthly ave maximum.
	Phenol .....	.....	0.026 mg/1, daily max. 0.015 mg/1, monthly ave maximum.
	Zinc (Total) .....	.....	0.20 mg/1, daily max. 0.11 mg/1, monthly ave maximum.
	pH .....	.....	Within the range of 6-9 pH units.

¹ These benchmark monitoring cutoff concentrations apply to storm water discharges associated with industrial activity other than contaminated storm water discharges from landfills subject to the numeric effluent limitations set forth in Table L-1. Monitor once/quarter for the year 2 and year 4 monitoring years.

² As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated storm water discharges from MSWLFs which have not been closed in accordance with 40 CFR 258.60, and contaminated storm water discharges from those landfills which are subject to the provisions of 40 CFR Part 257 except for discharges from any of facilities described in (a) through (d) below:

(a) landfills operated in conjunction with other industrial or commercial operations when the landfill only receives wastes generated by the industrial or commercial operation directly associated with the landfill;

(b) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;

(c) landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or

(d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

For the discharges subject to the numeric effluent limitations, monitoring for the specified parameters is required once/year during each year of the term of the permit.

6.M Sector M—Automobile Salvage Yards

6.M.1 Covered Storm Water Discharges

The requirements in Part 6.M apply to storm water discharges associated with industrial activity from Automobile Salvage Yards as identified by the Activity Code specified under Sector M in Table 1-1 of Part 1.2.1.

6.M.2 Industrial Activities Covered by Sector M

The types of activities that permittees under Sector M are primarily engaged in are dismantling or wrecking used motor vehicles for parts recycling/resale and for scrap.

6.M.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.M.3.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Indicate the

location of each monitoring point, and estimate the total acreage used for industrial activity including, but not limited to, dismantling, storage and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation/surface runoff:

Dismantling areas; parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas; liquid storage tanks and drums for fuel and other fluids.

6.M.3.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Assess the potential for the following to contribute pollutants to storm water discharges: Vehicle storage areas; dismantling areas; parts storage area (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers); fueling stations.

6.M.3.3 *Spill and Leak Prevention Procedures.* (See also Part 4.2.7.2.1.4) Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible); or employ some other equivalent means to prevent spills/leaks.

6.M.3.4 *Inspections.* (See also Part 4.2.7.2.1.5) Immediately (or as soon thereafter as feasible) inspect vehicles

arriving at the site for leaks. Inspect quarterly for signs of leakage, all equipment containing oily parts, hydraulic fluids or any other types of fluids. Also inspect quarterly for signs of leakage, all vessels and areas where fluids are stored, including, but not limited to, brake fluid, transmission fluid, radiator water and antifreeze.

6.M.3.5 *Employee Training.* (See also Part 4.2.7.2.1.6) If applicable to your facility, address the following areas (at a minimum) in your employee training program: Proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze and solvents.

6.M.3.6 *Management of Runoff.* (See also Part 4.2.7.2.2.2) Consider the following management practices: Berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks and above-ground liquid storage; installation of detention ponds; and the installation of filtering devices and oil/water separators.

6.M.4 Monitoring and Reporting Requirements. (See also Part 5)

TABLE M-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation
Sector of Permit Affected/Supplemental Requirements			
Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS).	100.0 mg/L.	
	Total Recoverable Aluminum.	0.75 mg/L.	
	Total Recoverable Iron	1.0 mg/L.	
	Total Recoverable Lead	0.0816 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

6.N Sector N—Scrap Recycling and Waste Recycling Facilities

6.N.1 Covered Storm Water Discharges

The requirements in Part N apply to storm water discharges associated with industrial activity from Scrap Recycling and Waste Recycling facilities as identified by the SIC Codes specified under Sector N in Table 1-1 of Part 1.2.1.

6.N.2 Industrial Activities Covered by Sector N

The types of activities that permittees under Sector N are primarily engaged in are:

6.N.2.1 processing, reclaiming and wholesale distribution of scrap and

waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, animal hides;

6.N.2.2 reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits and industrial solvents.

6.N.3 Coverage Under This Permit

Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum and tin cans). This includes recycling facilities commonly referred to as material recovery facilities (MRF).

6.N.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.2.2) Not covered by this permit: non-storm water discharges from turnings containment areas (see also Part 6.N.5.1.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES permit.

6.N.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4 of the MSGP. Part 6.N.4.1 contains a requirement that applies to all recycling facilities and is followed by Parts 6.N.4.2 to 6.N.4.4.4, which have requirements for specific types of

recycling facilities. Implement and describe in your SWPPP a program to address those items that apply. Included are lists of BMP options which, along with any functional equivalents, should be considered for implementation. Selection or deselection of a particular BMP or approach is up to the best professional judgement of the operator, as long as the objective of the requirement is met.

6.N.4.1 Drainage Area Site Map.
(See also Part 4.2.2.3)

Identify the locations of any of the following activities or sources which may be exposed to precipitation/surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment, and containment areas for turnings exposed to cutting fluids.

6.N.4.2 Scrap and Waste Recycling Facilities (Non-Source Separated, Non-Liquid Recyclable Materials).

Requirements for facilities that receive, process and do wholesale distribution of non-liquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard and paper). These facilities may receive both non-recyclable and recyclable materials. This section is not intended for those facilities that only accept recyclables from primarily non-industrial and residential sources.

6.N.4.2.1 Inbound Recyclable and Waste Material Control Program.

Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. BMP options: (a) Provide information/education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers and individual containers or drums), prior to delivery to your facility; (b) procedures to minimize the potential of any residual fluids from coming into contact with precipitation/runoff; (c) procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in N.5.1.6); (d) training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials. In addition, (e) liquid wastes, including used oil, must be stored in materially compatible and non-leaking containers and disposed or recycled in accordance with RCRA.

6.N.4.2.2 Scrap and Waste Material Stockpiles/Storage (Outdoor). Minimize contact of storm water runoff with

stockpiled materials, processed materials and non-recyclable wastes. BMP options: (a) Permanent or semi-permanent covers; (b) to facilitate settling or filtering of pollutants: sediment traps, vegetated swales and strips, catch basin filters and sand filters; (c) divert runoff away from storage areas via dikes, berms, containment trenches, culverts and surface grading; (d) silt fencing; (e) oil/water separators, sumps and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

6.N.4.2.3 Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor).

Minimize contact of surface runoff with residual cutting fluids. BMP options (use singularly or in combination): (a) Store all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover. Storm water discharges from these areas are permitted provided the runoff is first treated by an oil/water separator or its equivalent. Identify procedures to collect, handle and dispose/recycle residual fluids which may be present; (b) establish dedicated containment areas for all turnings that have been exposed to cutting fluids. Storm water runoff from these areas can be discharged provided: The containment areas are constructed of either concrete, asphalt or other equivalent types of impermeable material; there is a barrier around the perimeter of the containment areas (e.g., berms, curbing, elevated pads, etc.) to prevent contact with storm water run-on; there is a drainage collection system for runoff generated from containment areas; you have a schedule to maintain the oil/water separator (or its equivalent); and you identify procedures for properly disposing or recycling collected residual fluids.

6.N.4.2.4 Scrap and Waste Material Stockpiles/Storage (Covered or Indoor Storage). Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. BMP options: (a) Good housekeeping measures including the use of dry absorbent or wet vacuuming to contain or dispose/recycle residual liquids originating from recyclable containers; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; (c) disconnect or seal off all floor drains connected to the storm sewer system.

6.N.4.2.5 Scrap and Recyclable Waste Processing Areas. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate

visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). BMP options: (a) Regularly inspect equipment for spills/leaks, and malfunctioning/worn/corroded parts or equipment; (b) a preventive maintenance program for processing equipment; (c) use of dry-absorbents or other cleanup practices to collect and dispose/recycle spilled/leaking fluids; (e) on unattended hydraulic reservoirs over 150 gallons in capacity, install such protection devices as low-level alarms or other equivalent devices, or, alternatively, secondary containment that can hold the entire volume of the reservoir; (f) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, grading to minimize contact of storm water runoff with outdoor processing equipment or stored materials; (g) oil/water separators or sumps; (h) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (i) retention/detention ponds or basins; sediment traps, vegetated swales or strips (for pollutant settling/filtration); (j) catch basin filters or sand filters.

6.N.4.2.6 Scrap Lead-Acid Battery Program. Properly handle, store and dispose of scrap lead-acid batteries. BMP options: (a) Segregate scrap lead-acid batteries from other scrap materials; (b) proper handling, storage and disposal of cracked or broken batteries; (c) collect and dispose leaking lead-acid battery fluid; (d) minimize/eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; (e) employee training for the management of scrap batteries.

6.N.4.2.7 Spill Prevention and Response Procedures. (See also Part 4.2.7.2.1.4) Minimize storm water contamination at loading/unloading areas, and from equipment or container failures. BMP options: (a) Prevention and response measures for areas that are potential sources of fluid leaks/spills; (b) immediate containment and clean up of spills/leaks. If malfunctioning equipment is responsible for the spill/leak, repairs should also be conducted as soon as possible; (c) cleanup measures including the use of dry absorbents. If this method is employed, there should be an adequate supply of dry absorbent materials kept onsite and used absorbent must be properly disposed of; (d) store drums containing liquids—especially oil and lubricants—either: Indoors, in a bermed area, in overpack containers or spill pallets, or

in other containment devices; (e) install overflow prevention devices on fuel pumps or tanks; (f) place drip pans or equivalent measures under leaking stationary equipment until the leak is repaired. The drip pans should be inspected for leaks and potential overflow and all liquids must be properly disposed of (as per RCRA); (g) install alarms and/or pump shut off systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used.

6.N.4.2.8 Quarterly Inspection Program. (See also Part 4.2.7.2.1.5) Inspect all designated areas of the facility and equipment identified in the plan quarterly.

6.N.4.2.9 Supplier Notification Program. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or are only accepted under certain conditions.

6.N.4.3 Waste Recycling Facilities (Liquid Recyclable Materials).

6.N.4.3.1 Waste Material Storage (Indoor). Minimize/eliminate contact between residual liquids from waste materials stored indoors and surface runoff. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. BMP options: (a) procedures for material handling (including labeling and marking); (b) clean up spills/leaks with dry-absorbent materials or a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility, sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate NPDES wastewater permit or industrial user permit under the pretreatment program.

6.N.4.3.2 Waste Material Storage (Outdoor). Minimize contact between

stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. BMP options: (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) for storage tanks, provide corrosion protection and/or leak detection systems; (d) use dry-absorbent materials or a wet vacuum system to collect spills.

6.N.4.3.3 Trucks and Rail Car Waste Transfer Areas. Minimize pollutants in discharges from truck and rail car loading/unloading areas. Include measures to clean up minor spills/leaks resulting from the transfer of liquid wastes. BMP options: (a) containment and diversionary structures to minimize contact with precipitation or runoff; (b) use dry-clean up methods, wet vacuuming, roof coverings, or runoff controls.

6.N.4.3.4 Quarterly Inspections. (See also Part 4.2.7.2.1.5) At a minimum, the inspections must also include all areas where waste is generated, received, stored, treated or disposed and that are exposed to either precipitation or storm water runoff.

6.N.4.4 Recycling Facilities (Source Separated Materials). The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

6.N.4.4.1 Inbound Recyclable Material Control. Minimize the chance of accepting non-recyclables (e.g., hazardous materials) which could be a significant source of pollutants by conducting inspections of inbound materials. BMP options: (a) information/education measures to inform suppliers of recyclables which materials are acceptable and which are not; (b) training drivers responsible for pickup of recycled material; (c) clearly marking

public drop-off containers regarding which materials can be accepted; (d) reject non-recyclable wastes or household hazardous wastes at the source; (e) procedures for handling and disposal of non-recyclable material.

6.N.4.4.2 Outdoor Storage. Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Other BMP options: (a) provide totally-enclosed drop-off containers for the public; (b) install a sump/pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, roll-off boxes; (f) store the equivalent one days' volume of recyclable material indoors.

6.N.4.4.3 Indoor Storage and Material Processing. Minimize the release of pollutants from indoor storage and processing areas. BMP options: (a) schedule routine good housekeeping measures for all storage and processing areas; (b) prohibit tipping floor washwater from draining to the storm sewer system; (c) provide employee training on pollution prevention practices.

6.N.4.4.4 Vehicle and Equipment Maintenance. BMP options for those areas where vehicle and equipment maintenance are occurring outdoors: (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system; (b) minimize or eliminate outdoor maintenance areas whenever possible; (c) establish spill prevention and clean-up procedures in fueling areas; (d) avoid topping off fuel tanks; (e) divert runoff from fueling areas; (f) store lubricants and hydraulic fluids indoors; (g) provide employee training on proper handling, storage of hydraulic fluids and lubricants.

6.N.5 Monitoring and Reporting Requirements. (See also Part 5)

minimize contamination of storm water runoff from fueling areas. Consider the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing storm water runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

6.P.3.3.3 Material Storage Areas. Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of storm water and plainly label them (e.g., "Used Oil," "Spent Solvents," etc.). Consider the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of storm water to the areas; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

6.P.3.3.4 Vehicle and Equipment Cleaning Areas. Implement and describe measures that prevent or minimize contamination of storm water runoff from all areas used for vehicle/equipment cleaning. Consider the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the storm water drainage system unless NPDES permitted); treating and/or recycling collected storm water runoff, or other equivalent measures. Note: the discharge of vehicle/equipment washwater, including tank cleaning operations, are not authorized by this permit and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

6.P.3.3.5 Vehicle and Equipment Maintenance Areas. Implement and describe measures that prevent or minimize contamination of storm water runoff from all areas used for vehicle/equipment maintenance. Consider the following (or other equivalent measures): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to storm water drainage systems; using dry cleanup methods; treating and/or recycling collected storm water runoff, minimizing runoff of storm water to maintenance areas.

6.P.3.3.6 Locomotive Sanding (Loading Sand for Traction) Areas. Consider the following (or other equivalent measures): covering sanding areas; minimizing storm water runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by storm water.

6.P.3.4 Inspections. (See also Part 4.2.7.2.1.5) Inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas and loading/unloading areas.

6.P.3.5 Employee Training. (See also Part 4.2.7.2.1.6) Train personnel at least once a year and address the following, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

6.P.3.6 Vehicle and Equipment Washwater Requirements. (See also Part 4.4) Attach to or reference in your SWPPP, a copy of the NPDES permit issued for vehicle/equipment washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a pretreatment program, attach a copy to your SWPPP. In any case, address all non-storm water permit conditions or pretreatment conditions in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the plan.

6.Q Sector Q—Water Transportation

6.Q.1 Covered Storm Water Discharges

The requirements in Part 6.Q apply to storm water discharges associated with industrial activity from Water Transportation facilities as identified by the Activity Code specified under Sector Q in Table 1–1 of Part 1.2.1.

6.Q.2 Industrial Activities Covered by Sector Q

The requirements listed under this Part apply to storm water discharges associated with the following activities:

6.Q.2.1 Water transportation facilities classified in SIC Code major group 44 that have vehicle (vessel) maintenance shops and/or equipment cleaning operations including:

6.Q.2.1.1 Water transportation industry includes facilities engaged in foreign or domestic transport of freight

or passengers in deep sea or inland waters;

6.Q.2.1.2 Marine cargo handling operations;

6.Q.2.1.3 Ferry operations;

6.Q.2.1.4 Towing and tugboat services;

6.Q.2.1.5 Marinas.

6.Q.3 Limitations on Coverage

6.Q.3.1 Prohibition of Non-Storm Water Discharges. (See also Part 1.2.3.1) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water and cooling water originating from vessels.

6.Q.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.Q.4.1 Drainage Area Site Map. (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: fueling; engine maintenance/repair; vessel maintenance/repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

6.Q.4.2 Summary of Potential Pollutant Sources. (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (i.e., welding, metal fabricating); and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, painting).

6.Q.4.3 Good Housekeeping Measures. (See also Part 4.2.7.2.1.1)

6.Q.4.3.1 Pressure Washing Area. If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES permit. Describe in the SWPPP: the measures to collect or contain the discharges from the pressure washing area; the method for the removal of the visible solids; the methods of disposal of the collected solids; and where the discharge will be released.

6.Q.4.3.2 Blasting and Painting Area. Implement and describe measures to prevent spent abrasives, paint chips and over spray from discharging into the receiving water or the storm sewer systems. Consider containing all blasting/painting activities or use other measures to prevent or minimize the discharge the contaminants (e.g.,

hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). Where necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips. Detail in the SWPPP any standard operating practices relating to blasting/painting (e.g., prohibiting uncontained blasting/painting over open water, or prohibiting blasting/painting during windy conditions which can render containment ineffective).

6.Q.4.3.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from the storage areas. Specify which materials are stored indoors and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

6.Q.4.3.4 Engine Maintenance and Repair Areas. Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup methods; and treating and/or recycling storm water runoff collected from the maintenance area.

6.Q.4.3.5 Material Handling Area. Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas; using spill/overflow protection; mixing paints and solvents in a designated area (preferably indoors or under a shed); and minimize runoff of storm water to material handling areas.

6.Q.4.3.6 Drydock Activities. Describe your procedures for routinely maintaining/cleaning the drydock to prevent or minimize pollutants in storm water runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease or fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris/spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to contain/cleanup any spills.

6.Q.4.3.7 General Yard Area. Implement and describe a schedule for routine yard maintenance and cleanup. Regularly remove from the general yard area: scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc.

6.Q.4.4 Preventative Maintenance. (See also Part 4.2.7.2.1.4) As part of your preventive maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators and sediment traps to

ensure that spent abrasives, paint chips and solids will be intercepted and retained prior to entering the storm drainage system) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

6.Q.4.5 Inspections. (See also Part 4.2.7.2.1.5) Include the following areas in all monthly inspections: pressure washing area; blasting, sanding and painting areas; material storage areas; engine maintenance/repair areas; material handling areas; drydock area; and general yard area.

6.Q.4.6 Employee Training. (See also Part 4.2.7.2.1.6) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management; spent solvent management; disposal of spent abrasives; disposal of vessel wastewaters; spill prevention and control; fueling procedures; general good housekeeping practices; painting and blasting procedures; and used battery management.

6.Q.4.7 Comprehensive Site Compliance Evaluation. (See also Part 4.9) Conduct regularly scheduled evaluations at least once a year and address those areas contributing to a storm water discharge associated with industrial activity (e.g., pressure washing area, blasting/sanding areas, painting areas, material storage areas, engine maintenance/repair areas, material handling areas, and drydock area). Inspect these sources for evidence of, or the potential for, pollutants entering the drainage system.

6.Q.5 Monitoring and Reporting Requirements. (See also Part 5)

TABLE Q-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation
Part of Permit Affected/Supplemental Requirements			
Water Transportation Facilities (SIC 4412-4499)	Total Recoverable Aluminum..	0.75 mg/L	
		1.0 mg/L	
	Total Recoverable Iron.	0.0816 mg/L	
	Total Recoverable Lead. ...	0.117 mg/L	
	Total Recoverable Zinc.		

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.R Sector R—Ship and Boat Building or Repair Yards

6.R.1 Covered Storm Water Discharges

The requirements in Part 6.R apply to storm water discharges associated with industrial activity from Ship and Boat Building or Repair Yards as identified by the Activity Codes specified under Sector R in Table 1–1 of Part 1.2.1.

6.R.2 Industrial Activities Covered by Sector R

The types of activities that permittees under Sector R are primarily engaged in are:

6.R.2.1 Ship building and repairing and boat building and repairing³

6.R.3 Limitations on Coverage

6.R.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.1) Not covered by this permit: discharges containing bilge and ballast water, sanitary wastes, pressure wash water and cooling water originating from vessels.

6.R.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.R.4.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: fueling; engine maintenance/repair; vessel maintenance/repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

6.R.4.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing/processing activities (e.g., welding, metal fabricating); and significant dust/particulate generating processes (e.g., abrasive blasting, sanding, painting).

6.R.4.3 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1)

6.R.4.3.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted as a process wastewater by a separate NPDES permit.

6.R.4.3.2 *Blasting and Painting Area.* Implement and describe measures to prevent spent abrasives, paint chips and over spray from discharging into the receiving water or the storm sewer systems. Consider containing all blasting/painting activities or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). Where necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips. Detail in the SWPPP any standard operating practices relating to blasting/painting (e.g., prohibiting uncontained blasting/painting over open water, or prohibiting blasting/painting during windy conditions which can render containment ineffective).

6.R.4.3.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from the storage areas. Specify which materials are stored indoors and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

6.R.4.3.4 *Engine Maintenance and Repair Areas.* Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup methods; and treating and/or recycling storm water runoff collected from the maintenance area.

6.R.4.3.5 *Material Handling Area.* Implement and describe measures to prevent or minimize the contamination of precipitation/surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas; using spill/overflow protection; mixing paints and solvents in a designated area (preferably indoors or under a shed); and minimize runoff of storm water to material handling areas.

6.R.4.3.6 *Drydock Activities.*

Describe your procedures for routinely maintaining/cleaning the drydock to prevent or minimize pollutants in storm water runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease or fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris/spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to contain/cleanup any spills.

6.R.4.3.7 *General Yard Area.*

Implement and describe a schedule for routine yard maintenance and cleanup. Regularly remove from the general yard area: scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc.

6.R.4.4 *Preventative Maintenance.*

(See also Part 4.2.7.2.1.4) As part of your preventative maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators and sediment traps to ensure that spent abrasives, paint chips and solids will be intercepted and retained prior to entering the storm drainage system) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

6.R.4.5 *Inspections.* (See also Part 4.2.7.2.1.5) Include the following areas in all monthly inspections: pressure washing area; blasting, sanding and painting areas; material storage areas; engine maintenance/repair areas; material handling areas; drydock area; and general yard area.

6.R.4.6 *Employee Training.* (See also Part 4.2.7.2.1.6) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management; spent solvent management; disposal of spent abrasives; disposal of vessel wastewaters; spill prevention and control; fueling procedures; general good housekeeping practices; painting and blasting procedures; and used battery management.

6.R.4.7 *Comprehensive Site Compliance Evaluation.* (See also Part 4.9) Conduct regularly scheduled evaluations at least once a year and address those areas contributing to a storm water discharge associated with industrial activity (e.g., pressure

³ According to the U.S. Coast Guard, a vessel 65 feet or greater in length is referred to as a ship, and a vessel smaller than 65 feet is a boat.

washing area, blasting/sanding areas, painting areas, material storage areas, engine maintenance/repair areas, material handling areas, and drydock area). They must be visually inspected for evidence of, or the potential for, pollutants entering the drainage system.

6.S Sector S—Air Transportation

6.S.1 Covered Storm Water Discharges

The requirements in Part 6.S apply to storm water discharges associated with industrial activity from Air Transportation facilities as identified by the SIC Codes specified under Sector S in Table 1–1 of Part 1.2.1.

6.S.2 Industrial Activities Covered by Sector S

The types of activities that permittees under Sector S are primarily engaged in are:

6.S.2.1 Air transportation, scheduled, and air courier;

6.S.2.2 Air transportation, non scheduled;

6.S.2.3 Airports; flying fields, except those maintained by aviation clubs; and airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations.

6.S.2.4 Airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing/repairing, except on a factory basis; vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport and aircraft deicing/anti-icing.

Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

6.S.3 Limitations on Coverage

Only those portions of the facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations are addressed in Part 6.S.

6.S.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.1) Not covered by this permit: aircraft, ground vehicle, runway and equipment washwaters; and dry weather discharges of deicing chemicals. These discharges must be covered by a separate NPDES permit.

6.S.4 Special Conditions

6.S.4.1 *Hazardous Substances or Oil.* (See also Part 3.1) Each individual permittee is required to report spills equal to or exceeding the reportable quantity (RQ) levels specified at 40 CFR 110, 117 and 302 as described at Part 3.2. If an airport authority is the sole permittee, then the sum total of all spills at the airport must be assessed against the RQ. If the airport authority is a co-permittee with other deicing operators at the airport, such as numerous different airlines, the assessed amount must be the summation of spills by each co-permittee. If separate, distinct individual permittees exist at the airport, then the amount spilled by each separate permittee must be the assessed amount for the RQ determination.

6.S.5 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4 of the MSGP.

(See also Part 4.1) If an airport's tenant has a SWPPP for discharges from their own areas of the airport, that SWPPP must be integrated with the plan for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in storm water discharges associated with industrial activity.

6.S.5.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

6.S.5.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Include in your inventory of exposed materials a description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols

and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion in any comprehensive airport SWPPPs.

6.S.5.3 *Good Housekeeping Measures.* (See also 4.2.7)

6.S.5.3.1 *Aircraft, Ground Vehicle and Equipment Maintenance Areas.* Describe and implement measures that prevent or minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.

6.S.5.3.2 *Aircraft, Ground Vehicle and Equipment Cleaning Areas.* Clean equipment only in the areas identified in the SWPPP and site map and clearly demarcate these areas on the ground. Describe and implement measures that prevent or minimize the contamination of storm water runoff from cleaning areas.

6.S.5.3.3 *Aircraft, Ground Vehicle and Equipment Storage Areas.* Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only. Consider the following BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

6.S.5.3.4 *Material Storage Areas.* Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.). Describe and implement measures that prevent or minimize contamination of precipitation/runoff from these areas. Consider the following BMPs (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

6.S.5.3.5 *Airport Fuel System and Fueling Areas.* Describe and implement

measures that prevent or minimize the discharge of fuel to the storm sewer/ surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following BMPs (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting storm water runoff.

6.S.5.3.6 Source Reduction. Consider alternatives to the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous sodium acetate.

6.S.5.3.6.1 Runway Deicing Operation: Evaluate, at a minimum, whether over-application of deicing chemicals occurs by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also consider these BMP options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

6.S.5.3.6.2 Aircraft Deicing Operations: As in Part 6.S.5.3.6.1, determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. EPA

intends for this evaluation to be carried out by the personnel most familiar with the particular aircraft and flight operations in question (vice an outside entity such as the airport authority). Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these BMP options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

6.S.5.3.7 Management of Runoff. Where deicing operations occur, describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. Consider these BMP options (or their equivalents): a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated storm water/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-

precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of storm water contamination. Used deicing fluid should be recycled whenever possible.

6.S.5.4 Inspections. (See also Part 4.2.7.2.1.5) Specify the frequency of inspections in your SWPPP. At a minimum they must be conducted monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, increase the frequency of your inspections to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels. The Director may specifically require you to increase inspections and SWPPP reevaluations as necessary.

6.S.5.5 Comprehensive Site Compliance Evaluation. (See also 4.9) (See also Part 4.9)

Using only qualified personnel, conduct your annual site compliance evaluations during periods of actual deicing operations, if possible. If not practicable during active deicing or the weather is too inclement, conduct the evaluations when deicing operations are likely to occur and the materials and equipment for deicing are in place.

6.S.6 Monitoring and Reporting Requirements. (See also Part 5)

TABLE S-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation
Sector of Permit Affected/Supplemental Requirements			
Facilities at airports that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport facility that collect runoff from areas where deicing/anti-icing activities occur (SIC 45XX).	Biochemical Oxygen Demand (BOD ₅).	30 mg/L Chemical Oxygen Demand (COD).	120.0mg/L. Ammonia 19 mg/L. pH 6/0 to 9 s.u

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

6.T Sector T—Treatment Works

6.T.1 Covered Storm Water Discharges

The requirements in Part 6.T apply to storm water discharges associated with industrial activity from Treatment Works as identified by the Activity Code

specified under Sector T in Table 1-1 of Part 1.2.1.

6.T.2 Industrial Activities Covered by Sector T

The requirements listed under this Part apply to all existing point source

storm water discharges associated with the following activities:

6.T.2.1 treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling and reclamation of municipal

or domestic sewage; including land dedicated to the disposal of sewage sludge; that are located within the confines of the facility with a design flow of 1.0 MGD or more; or required to have an approved pretreatment program under 40 CFR Part 403.

6.T.2.2 Not required to have permit coverage: farm lands; domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility; or areas that are in compliance with Section 405 of the CWA.

6.T.3 Limitations on Coverage

6.T.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.1) Not authorized by this permit: sanitary and industrial wastewater; and equipment/vehicle washwater.

6.T.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.T.4.1 *Site Map.* (See also Part 4.2.2.3.6) Identify where any of the following may be exposed to precipitation/surface runoff: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides.

6.T.4.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads/rail lines.

6.T.4.3 *Best Management Practices (BMPs).* (See also Part 4.2.7.2) In addition to the other BMPs considered, consider the following: routing storm water to the treatment works; or covering exposed materials (*i.e.*, from the following areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station).

6.T.4.4 *Inspections.* (See also Part 4.2.7.2.1.5) Include the following areas in all inspections: access roads/rail lines; grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles;

compost piles; septage or hauled waste receiving station areas.

6.T.4.5 *Employee Training.* (See also Part 4.2.7.2.1.6) At a minimum, must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; proper procedures for using fertilizer, herbicides and pesticides.

6.T.4.6 *Wastewater and Washwater Requirements.* (See also Part 4.4) Attach to your SWPPP a copy of all your current NPDES permits issued for wastewater, industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending applications. Address any requirements/conditions from the other permits, as appropriate, in the SWPPP. If the washwater is handled in another manner, the disposal method must be described and all pertinent documentation must be attached to the plan.

6.U Sector U—Food and Kindred Products

6.U.1 Covered Storm Water Discharges

The requirements in Part 6.U apply to storm water discharges associated with industrial activity from Food and Kindred Products facilities as identified by the SIC Codes specified in Table 1-1 of Part 1.2.1.

6.U.2 Industrial Activities Covered by Sector U

The types of activities that permittees under Sector U are primarily engaged in are:

- 6.U.2.1 meat products;
- 6.U.2.2 dairy products;
- 6.U.2.3 canned, frozen and preserved fruits, vegetables, and food specialties;
- 6.U.2.4 grain mill products;
- 6.U.2.5 bakery products;
- 6.U.2.6 sugar and confectionery products;
- 6.U.2.7 fats and oils;
- 6.U.2.8 beverages;
- 6.U.2.9 miscellaneous food preparations and kindred products and tobacco products manufacturing.

6.U.3 Limitations on Coverage

Not covered by this permit: storm water discharges identified under Part 1.2.3 from industrial plant yards, material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for

storage and maintenance of material handling equipment; sites used for residential wastewater treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; and storage areas for raw material and intermediate and finished products. This includes areas where industrial activity has taken place in the past and significant materials remain. "Material handling activities" include the storage, loading/unloading, transportation or conveyance of any raw material, intermediate product, finished product, by-product or waste product.

6.U.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.2.2) Not authorized by this permit: discharges subject to Part 1.2.2.2 include discharges containing: boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging and vehicle washing/clean-out operations.

6.U.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.U.4.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify the locations of the following activities if they are exposed to precipitation/runoff: vents/stacks from cooking, drying and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

6.U.4.2 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (*e.g.*, rodenticides, insecticides, fungicides, etc.) used on plant grounds.

6.U.4.3 *Inspections.* (See also Part 4.2.7.2.1.5) Inspect on a regular basis, at a minimum, the following areas where the potential for exposure to storm water exists: loading and unloading areas for all significant materials; storage areas including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

6.U.4.4 *Employee Training.* (See also Part 4.2.7.2.1.6) Address pest control in the training program.

6.U.5 Monitoring and Reporting Requirements. (See also Part 5)

TABLE U-1. SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one Sector/Subsector)	Parameter	Benchmark monitoring cut-off concentration ¹	Numeric limitation
Part or Permit Affected/Supplemental Requirements			
Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS).	100 mg/L.	
Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD ₅).	30 mg/L.	
	Chemical Oxygen Demand (COD).	120 mg/L.	
	Nitrate plus Nitrate Nitrogen.	0.68 mg/L.	
	Total Suspended Solids (TSS).	100 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.V Sector V—Textile Mills, Apparel and Other Fabric Products

6.V.1 Covered Storm Water Discharges

The requirements in Part 6.V apply to storm water discharges associated with industrial activity from Textile Mills, Apparel, and Other Fabric Product Manufacturing as identified by the Activity Code specified under Sector V in Table 1-1 of Part 1.2.1.

6.V.2 Industrial Activities Covered by Sector V

The types of activities that permittees under Sector V are primarily engaged in are:

6.V.2.1 textile mill products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn;

6.V.2.2 processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel;

6.V.2.3 the integrated manufacturing of knit apparel and other finished articles of yarn;

6.V.2.4 the manufacturing of felt goods (wool), lace goods, non-woven fabrics, miscellaneous textiles, and other apparel products.

6.V.3 Limitations on Coverage

6.V.3.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.2.3.1) Not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process); reused/recycled water; and waters used in cooling towers. If you have these types of discharges from your facility, you must cover them under a separate NPDES permit.

6.V.4 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.V.4.1 *Potential Pollutant Sources.* (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them: industrial-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

6.V.4.2 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1)

6.V.4.2.1 *Material Storage Area.* Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, dyes, etc.) in a protected area, away from drains. Describe and implement measures that prevent or minimize contamination of the storm water runoff from such storage areas, including a description of the containment area or enclosure for those materials stored outdoors. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums/containers, ensure the drums/containers are clean (consider triple-rinsing) and there is no contact of residuals with precipitation/runoff. Collect and dispose of washwater from these cleanings properly.

6.V.4.2.2 *Material Handling Area.* Describe and implement measures that prevent or minimize contamination of storm water runoff from material handling operations and areas. Consider

the following (or their equivalents): use of spill/overflow protection; covering fueling areas; and covering/enclosing areas where the transfer of material may occur. Where applicable address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals, dyes or wastewater.

6.V.4.2.3 *Fueling Areas.* Describe and implement measures that prevent or minimize contamination of storm water runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of storm water to the fueling areas, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the fueling area.

6.V.4.2.4 *Above Ground Storage Tank Area.* Describe and implement measures that prevent or minimize contamination of the storm water runoff from above ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; preparation of the spill prevention control and countermeasure program, provide spill and overflow protection; minimizing runoff of storm water from adjacent areas; restricting access to the area; insertion of filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

6.V.4.3 *Inspections.* (See also Part 4.2.7.2.1.5) Inspect, at least on a monthly basis, the following activities and areas (at a minimum): transfer and transmission lines; spill prevention; good housekeeping practices; management of process waste products; all structural and non structural management practices.

6.V.4.4 Employee Training. (See also Part 4.2.7.2.1.6) As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused/recycling waters; solvents management; proper disposal of dyes; proper disposal of petroleum products and spent lubricants; spill prevention and control; fueling procedures; and general good housekeeping practices.

6.V.4.5 Comprehensive Site Compliance Evaluation. (See also Part 4.9) Conduct regularly scheduled evaluations at least once a year and address those areas contributing to a storm water discharge associated with industrial activity for evidence of, or the potential for, pollutants entering the drainage system. Inspect, at a minimum, as appropriate: storage tank areas; waste disposal and storage areas; dumpsters and open containers stored outside; materials storage areas; engine maintenance and repair areas; material handling areas and loading dock areas.

6.W Sector W—Furniture and Fixtures

6.W.1 Covered Storm Water Discharges

The requirements in Part 6.W apply to storm water discharges associated with industrial activity from Furniture and Fixtures facilities as identified by the Activity Code specified under Sector W in Table 1–1 of Part 1.2.1.

6.W.2 Industrial Activities Covered by Sector W

The types of activities that permittees under Sector W are primarily engaged in the manufacturing of:

- 6.W.2.1 wood kitchen cabinets;
- 6.W.2.2 household furniture;
- 6.W.2.3 office furniture;
- 6.W.2.4 public buildings and related furniture;
- 6.W.2.5 partitions, shelving, lockers, and office and store fixtures;
- 6.W.2.6 miscellaneous furniture and fixtures.

6.W.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.W.3.1 Drainage Area Site Map. (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored or disposed; access roads; and rail spurs.

6.X Sector X—Printing and Publishing

6.X.1 Covered Storm Water Discharges

The requirements in Part 6.X apply to storm water discharges associated with industrial activity from Printing and Publishing facilities as identified by the Activity Code specified under Sector X in Table 1.1 of Part 1.2.1.

6.X.2 Industrial Activities Covered by Sector X

The types of activities that permittees under Sector X are primarily engaged in are:

- 6.X.2.1 book printing;
- 6.X.2.2 commercial printing and lithographics;
- 6.X.2.3 plate making and related services;
- 6.X.2.4 commercial printing, gravure;
- 6.X.2.5 commercial printing not elsewhere classified.

6.X.3 Storm Water Pollution Prevention Plan Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.X.3.1 Drainage Area Site Map. (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: above ground storage tanks, drums and barrel permanently stored outside.

6.X.3.2 Potential Pollutant Sources. (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them, as applicable: loading and unloading operations; outdoor storage activities; significant dust or particulate generating processes; and onsite waste disposal practices (e.g., blanket wash). Also identify the pollutant or pollutant parameter (e.g., oil and grease, scrap metal, etc.) associated with each pollutant source.

6.X.3.3 Good Housekeeping Measures. (See also Part 4.2.7.2.1.1)

6.X.3.3.1 Material Storage Areas. Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, and hazardous waste, empty drums, portable/mobile containers of plant debris, wood crates, steel racks, fuel oil, etc.) in a protected area, away from drains. Describe and implement measures that prevent or minimize contamination of the storm water runoff from such storage areas, including a description of the containment area or enclosure for those materials stored outdoors. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

6.X.3.3.2 Material Handling Area. Describe and implement measures that prevent or minimize contamination of storm water runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading/unloading materials). Consider the following (or their equivalents): use of spill/overflow protection; covering fueling areas; and covering/enclosing areas where the transfer of materials may occur. Where applicable address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals or wastewater.

6.X.3.3.3 Fueling Areas. Describe and implement measures that prevent or minimize contamination of storm water runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of storm water to the fueling areas, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the fueling area.

6.X.3.3.4 Above Ground Storage Tank Area. Describe and implement measures that prevent or minimize contamination of the storm water runoff from above ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; preparation of the spill prevention control and countermeasure program, provide spill and overflow protection; minimizing runoff of storm water from adjacent areas; restricting access to the area; insertion of filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

6.X.3.4 Employee Training. (See also Part 4.2.7.2.1.6) As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management; spill prevention and control; used oil management; fueling procedures; and general good housekeeping practices.

6.Y Sector Y—Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries

6.Y.1 Covered Storm Water Discharges

The requirements in Part 6.Y apply to storm water discharges associated with industrial activity from Rubber, Miscellaneous Plastic Products and Miscellaneous Manufacturing Industries facilities as identified by the Activity

Code specified under Sector Y in Table 1-1 of Part 1.2.1.

6.Y.2 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.Y.2.1 *Potential Pollutant Sources.* (See also Part 4.2.4) Review the use of zinc at your facility and the possible pathways through which zinc may be discharged in storm water runoff.

6.Y.2.2 *Controls for Rubber Manufacturers.* (See also Part 4.2.7) Describe and implement specific controls to minimize the discharge of zinc in your storm water discharges. Parts 6.Y.2.2.1 to 6.Y.2.2.5 give possible sources of zinc to be reviewed and list some specific BMPs to be considered for implementation (or their equivalents). Some general BMP options to consider: using chemicals which are purchased in pre-weighed, sealed polyethylene bags; storing materials which are in use in

sealable containers; ensuring an airspace between the container and the cover to minimize "puffing" losses when the container is opened; and using automatic dispensing and weighing equipment.

6.Y.2.2.1 *Inadequate Housekeeping.* Review the handling and storage of zinc bags at your facility. BMP options: employee training on the handling/storage of zinc bags; indoor storage of zinc bags; cleanup zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks;

6.Y.2.2.2 *Dumpsters.* Reduce discharges of zinc from dumpsters. BMP options: covering the dumpster; moving the dumpster indoors; or provide a lining for the dumpster.

6.Y.2.2.3 *Malfunctioning Dust Collectors or Baghouses:* Review dust collectors/baghouses as possible sources in zinc in storm water runoff. Replace or repair, as appropriate, improperly operating dust collectors/baghouses.

6.Y.2.2.4 *Grinding Operations.*

Review dust generation from rubber grinding operations and, as appropriate, install a dust collection system.

6.Y.2.2.5 *Zinc Stearate Coating Operations.* Detail appropriate measures to prevent or clean up drips/spills of zinc stearate slurry that may be released to the storm drain. BMP option: using alternate compounds to zinc stearate.

6.Y.2.3 *Controls for Plastic Products Manufacturers.* Describe and implement specific controls to minimize the discharge of plastic resin pellets in your storm water discharges. BMPs to be considered for implementation (or their equivalents): minimizing spills; cleaning up of spills promptly and thoroughly; sweeping thoroughly; pellet capturing; employee education and disposal precautions.

6.Y.3 Monitoring and Reporting Requirements. (See also Part 5)

TABLE Y-1.—SECTOR-SPECIFIC NUMERIC EFFLUENT LIMITATIONS AND BENCHMARK MONITORING

Subsector	Parameter	Benchmark monitoring cut-off concentration	Numeric limitations
Part of Permit Affected/Supplemental Requirements			
Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified (SIC 3011-3069, rubber.	Total Recoverable Zinc	0.117 mg/L	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years.

6.Z Sector Z—Leather Tanning and Finishing

6.Z.1 Covered Storm Water Discharges

The requirements in Part 6.Z apply to storm water discharges associated with industrial activity from Leather Tanning and Finishing facilities as identified by the Activity Code specified under Sector Z in Table 1-1 of Part 1.2.1.

6.Z.2 Industrial Activities Covered by Sector Z

The types of activities that permittees under Sector Z are primarily engaged are leather tanning, curry and finishing;

6.Z.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.Z.3.1 *Drainage Area Site Map.* (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and

dry finishing operations; and haul roads, access roads and rail spurs.

6.Z.3.2 *Potential Pollutant Sources.* (See also Part 4.2.4) At a minimum, describe the following additional sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings and shavings; chemical drums, bags, containers and above ground tanks; empty chemical containers and bags; spent solvents; floor sweepings/washings; refuse, waste piles and sludge; and significant dust/particulate generating processes (e.g., buffing).

6.Z.3.3 *Good Housekeeping Measures.* (See also Part 4.2.7.2.1.1)

6.Z.3.3.1 *Storage Areas for Raw, Semiprocessed or Finished Tannery Byproducts.* Pallets/bales of raw, semiprocessed or finished tannery byproducts (e.g., splits, trimmings, shavings, etc.) should be stored indoors or protected by polyethylene wrapping, tarpaulins, roofed storage, etc. Consider placing materials on an impermeable

surface, and enclosing or putting berms (or equivalent measures) around the area to prevent storm water runoff/runoff.

6.Z.3.3.2 *Material Storage Areas.* Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials). Describe and implement measures that prevent/minimize contact with storm water.

6.Z.3.3.3 *Buffing and Shaving Areas.* Describe and implement measures that prevent or minimize contamination of storm water runoff with leather dust from buffing/shaving areas. Consider dust collection enclosures, preventive inspection/maintenance programs or other appropriate preventive measures.

6.Z.3.3.4 *Receiving, Unloading, and Storage Areas.* Describe and implement measures that prevent or minimize contamination of storm water runoff from receiving, unloading, and storage areas. If these areas are exposed, consider (or their equivalent): Covering all hides and chemical supplies; diverting drainage to the process sewer;

or grade berming/curbing area to prevent runoff of storm water.

6.Z.3.3.5 Outdoor Storage of Contaminated Equipment. Describe and implement measures that prevent or minimize contact of storm water with contaminated equipment. Consider (or their equivalent): Covering equipment; diverting drainage to the process sewer; and cleaning thoroughly prior to storage.

6.Z.3.3.6 Waste Management. Describe and implement measures that prevent or minimize contamination of storm water runoff from waste storage areas. Consider (or their equivalent): Inspection/maintenance programs for leaking containers or spills; covering dumpsters; moving waste management activities indoors; covering waste piles with temporary covering material such as tarpaulins or polyethylene; and minimizing storm water runoff by enclosing the area or building berms around the area.

6.AA Sector AA—Fabricated Metal Products

6.AA.1 Covered Storm Water Discharges

The requirements in Part 6.AA apply to storm water discharges associated with industrial activity from Fabricated Metal Products facilities as identified by the Activity Code specified under Sector AA in Table 1–1 of Part 1.2.1.

6.AA.2 Industrial Activities Covered by Sector AA

The types of activities that permittees under Sector AA are primarily engaged in are:

6.AA.2.1 Fabricated metal products; except for electrical related industries;
6.AA.2.2 Fabricated metal products; except machinery and transportation equipment;

6.AA.2.3 Jewelry, silverware, and plated ware.

6.AA.3 Storm Water Pollution Prevention Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.AA.3.1 Drainage Area Site Map. (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: Raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary/permanent diversion dikes or berms; right-of-way

or perimeter diversion devices; sediment traps/barriers; processing areas including outside painting areas; wood preparation; recycling; and raw material storage.

6.AA.3.2 Spills and Leaks. (See also Part 4.2.5) When listing significant spills/leaks, pay attention to the following materials at a minimum: Chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals and hazardous chemicals and wastes.

6.AA.3.3 Potential Pollutant Sources. (See also Part 4.2.4) Describe the following additional sources and activities that have potential pollutants associated with them: Loading and unloading operations for paints, chemicals and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cob, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, brazing, etc; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingots pieces, refuse and waste piles.

6.AA.3.4 Good Housekeeping Measures. (See also Part 4.2.7.2.1.1)

6.AA.3.4.1 Raw Steel Handling Storage. Describe and implement measures controlling or recovering scrap metals, fines and iron dust. Include measures for containing materials within storage handling areas.

6.AA.3.4.2 Paints and Painting Equipment. Describe and implement measures to prevent or minimize exposure of paint and painting equipment to storm water.

6.AA.3.5 Spill Prevention and Response Procedures. (See also Part 4.2.7.2.1.4) Ensure the necessary equipment to implement a clean up is available to personnel. The following areas should be addressed:

6.AA.3.5.1 Metal Fabricating Areas. Describe and implement measures for maintaining clean, dry, orderly conditions in these areas. Consider the use of dry clean-up techniques.

6.AA.3.5.2 Storage Areas for Raw Metal. Describe and implement measures to keep these areas free of condition that could cause spills or leakage of materials. Consider the following (or their equivalents): maintaining storage areas such that there is easy access in the event of a spill; and labeling stored materials to aid in identifying spill contents.

6.AA.3.5.3 Receiving, Unloading, and Storage Areas. Describe and

implement measures to prevent spills and leaks; plan for quick remedial clean up; and instruct employees on clean-up techniques and procedures.

6.AA.3.5.4 Storage of Equipment. Describe and implement measures for preparing equipment for storage and the proper storage of equipment. Consider the following (or their equivalents): protecting with covers; storing indoors; and cleaning potential pollutants from equipment to be stored outdoors.

6.AA.3.5.5 Metal Working Fluid Storage Areas. Describe and implement measures for storage of metal working fluids.

6.AA.3.5.6 Cleaners and Rinse Water. Describe and implement measures: to control/cleanup spills of solvents and other liquid cleaners; control sand buildup and disbursement from sand-blasting operations; and prevent exposure of recyclable wastes. Substitute environmentally-benign cleaners when possible.

6.AA.3.5.7 Lubricating Oil and Hydraulic Fluid Operations. Consider using monitoring equipment or other devices to detect and control leaks/overflows. Consider installing perimeter controls such as dikes, curbs, grass filter strips or other equivalent measures.

6.AA.3.5.8 Chemical Storage Areas. Describe and implement proper storage methods that prevent storm water contamination and accidental spillage. Include a program to inspect containers and identify proper disposal methods.

6.AA.3.6 Inspections. (See also Part 4.2.7.2.1.5) Include, at a minimum, the following areas in all inspections: raw metal storage areas; finished product storage areas; material and chemical storage areas; recycling areas; loading and unloading areas; equipment storage areas; paint areas; vehicle fueling and maintenance areas.

6.AA.3.7 Comprehensive Site Compliance Evaluation. (See also Part 4.9.2) As part of your evaluation, also inspect: areas associated with the storage of raw metals; storage of spent solvents and chemicals; outdoor paint areas; and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel and other related materials.

6.AA.4 Monitoring and Reporting Requirements

(See also Part 5)

TABLE AA-1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK MONITORING

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark, monitoring, cutoff, concentration ¹	Numeric limitation
Part of Permit Affected/Supplemental Requirements			
Fabricated Metal Products Except Coating (SIC 3411–3471, 3482–3499, 3911–3915).	Total Recoverable Aluminum.	0.75 mg/L.	
	Total Recoverable Iron	1.0 mg/L.	
	Total Recoverable Zinc	0.117 mg/L.	
	Nitrate plus Nitrite Nitrogen	0.68 mg/L.	
Fabricated Metal Coating and Engraving (SIC 3479)	Total Recoverable Zinc	0.117 mg/L.	
	Nitrate plus Nitrite Nitrogen	0.68 mg/L.	

¹ Monitor once/quarter for the year 2 and year 4 Monitoring Years

6.AB Sector AB—Transportation Equipment, Industrial or Commercial Machinery

6.AB.1 Covered Storm Water Discharges

The requirements in Part 6.AB apply to storm water discharges associated with industrial activity from Transportation Equipment, Industrial or Commercial Machinery facilities as identified by the Activity Code specified under Sector AB in Table 1–1 of Part 1.2.1.

6.AB.2 Industrial Activities Covered by Sector AB

The types of activities that permittees under Sector AB are primarily engaged in are:

6.AB.2.1 Industrial and Commercial Machinery (except Computer and Office Equipment) (see Sector AC); and

6.AB.2.2 Transportation Equipment (except Ship and Boat Building and Repairing) (see Sector R).

6.AB.3 Storm Water Pollution Plan (SWPPP) Requirements

In addition to the following requirements, you must also comply with the requirements listed in Part 4.

6.AB.3.1 *Drainage Area Site Map*. (See also Part 4.2.2.3) Identify where any of the following may be exposed to precipitation/surface runoff: vents and stacks from metal processing and similar operations.

6.AB.3.2 *Non-Storm Water Discharges*. (See also Part 4.4) If your facility has a separate NPDES permit (or has applied for a permit) authorizing discharges of wastewater, attach a copy of the permit (or the application) to your SWPPP. Any new wastewater permits issued/reissued to you must then replace the old one in your SWPPP. If you discharge wastewater, other than solely domestic wastewater, to a Publicly Owned Treatment Works (POTW), you must notify the POTW of the discharge (identify the types of

wastewater discharged, including any storm water). As proof of this notification, attach to your SWPPP a copy of the permit issued to your facility by the POTW or a copy of your notification to the POTW.

6.AC Sector AC—Electronic, Electrical Equipment and Components, Photographic and Optical Goods

6.AC.1 Covered Storm Water Discharges

The requirements in Part 6.AC apply to storm water discharges associated with industrial activity from facilities that manufacture Electronic, Electrical Equipment and Components, Photographic and Optical Goods as identified by the SIC Codes specified in Table 1–1 of Part 1.2.1.

6.AC.2 Industrial Activities Covered by Sector AC

The types of manufacturing activities that permittees under Sector AC are primarily engaged in are:

6.AC.2.1 Measuring, analyzing, and controlling instruments;

6.AC.2.2 Photographic, medical and optical goods;

6.AC.2.3 Watches and clocks; and

6.AC.2.4 Computer and office equipment.

6.AC.3 Additional Requirements

No additional sector-specific requirements apply to this sector.

6.AD Storm Water Discharges Designated by the Director as Requiring Permits

6.AD.1 Covered Storm Water Discharges

Sector AD is used to provide permit coverage for facilities designated by the Director as needing a storm water permit, or any discharges of industrial activity that do not meet the description of an industrial activity covered by Sectors A–AC. Therefore, almost any type of storm water discharge could be covered under this sector. You must be

assigned to Sector AD by the Director and may NOT choose sector AD as the sector describing your activities on your own.

6.AD.1.1 *Eligibility for Permit Coverage*. Because this Sector only covers discharges designated by the Director as needing a storm water permit (which is an atypical circumstance) or your facility's industrial activities were inadvertently left out of Sectors A–AC, and your facility may or may not normally be discharging storm water associated with industrial activity, you must obtain the Director's written permission to use this permit prior to submitting a Notice of Intent. If you are authorized to use this permit, you will be required to ensure your discharges meet the basic eligibility provisions of this permit at Part 1.2.

6.AD.2 Storm Water Pollution Prevention Plan (SWPPP) Requirements

The Director will establish any additional Storm Water Pollution Prevention Plan requirements for your facility at the time of accepting your Notice of Intent to be covered by this permit. Additional requirements would be based on the nature of activities at your facility and your storm water discharges.

6.AD.3 Monitoring and Reporting Requirements

The Director will establish any additional monitoring and reporting requirements for your facility at the time of accepting your Notice of Intent to be covered by this permit. Additional requirements would be based on the nature of activities at your facility and your storm water discharges.

7. Reporting

7.1 Reporting Results of Monitoring

Depending on the types of monitoring required for your facility, you may have to submit the results of your monitoring or you may only have to keep the results

with your Storm Water Pollution Prevention Plan. You must follow the reporting requirements and deadlines in Table 7-1 that apply to the types of monitoring that apply to your facility.

If required by the conditions of the permit that apply to your facility, you must submit analytical monitoring results obtained from each outfall associated with industrial activity (or a certification as per 5.3.1) on a Discharge

Monitoring Report (DMR) form (one form must be submitted for each storm event sampled). An example of a form is found in the Guidance Manual for the Monitoring and Reporting Requirements of the NPDES Storm Water Multi-Sector General Permit. A copy of the DMR is also available on the Internet at <http://www.epa.gov/owm/sw/permits-and-forms/index.htm>. The signed DMR must

be sent to: MSGP DMR (4203), US EPA, 1200 Pennsylvania Avenue NW., Washington, DC 20460.

Note: If EPA notifies dischargers (either directly, by public notice or by making information available on the Internet) of other DMR form options that become available at a later date (e.g., electronic submission of forms), you may take advantage of those options to satisfy the DMR use and submission requirements of Part 7.

TABLE 7-1.—DMR/ALTERNATIVE CERTIFICATION SUBMISSION DEADLINES

Type of monitoring	Reporting deadline (postmark)
Monitoring for Numeric Limitation	Submit results by the 28th day of the month following the monitoring period.
Benchmark Monitoring:	
Monitoring Year 2001-2002	Save and submit all results for year in one package by January 28, 2003.
Monitoring Year 2003-2004	Save and submit all results for year in one package by January 28, 2005.
Biannual Monitoring for Metal Mining Facilities (see Part 6.G).	Save and submit all results for year in one package by January 28 of the year following the monitoring year.
Visual Monitoring	Retain results with SWPPP—do not submit unless requested to do so by Permitting Authority.
State/Tribal/Territory—Specific Monitoring	See Part 13 (conditions for specific States, Indian country, and Territories).

7.2 Additional Reporting for Dischargers to a Large or Medium Municipal Separate Storm Sewer System

If you discharge storm water discharge associated with industrial activity through a large or medium municipal separate storm sewer system (systems serving a population of 100,000 or more), you must also submit signed copies of your discharge monitoring reports to the operator of the municipal separate storm sewer system in accordance with the dates provided in Table 7-1.

7.3 Miscellaneous Reports

You must submit any other reports required by this permit to the Director of the NPDES program at the address of the appropriate Regional Office listed in Part 8.3.

8. Retention of Records

8.1 Documents

In addition to the requirements of Part 9.16.2, you must retain copies of Storm Water Pollution Prevention Plans and all reports and certifications required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, for a period of at least three years from the date that the facility's coverage under this permit expires or is terminated. This period may be extended by request of the Director at any time.

8.2 Accessibility

You must retain a copy of the Storm Water Pollution Prevention Plan required by this permit (including a copy of the permit language) at the

facility (or other local location accessible to the Director, a State, Tribal or Territorial agency with jurisdiction over water quality protection; local government officials; or the operator of a municipal separate storm sewer receiving discharges from the site) from the date of permit coverage to the date of permit coverage ceases. You must make a copy of your Storm Water Pollution Prevention Plan available to the public if requested to do so in writing.

8.3 Addresses

Except for the submittal of NOIs and NOTs (see Parts 2.1 and 11.2, respectively), all written correspondence concerning discharges in any State, Indian country land, Territory, or from any Federal facility covered under this permit and directed to the EPA, including the submittal of individual permit applications, must be sent to the address of the appropriate EPA Regional Office listed below:

8.3.1 Region 1: CT, MA, ME, NH, RI, VT

EPA Region 1, Office of Ecosystem Protection, One Congress Street—CMU, Boston, MA 02114.

8.3.2 Region 2: NJ, NY, PR, VI

United States EPA, Region 2, Caribbean Environmental Protection Division, Environmental Management Branch, Centro Europa Building, 1492 Ponce de Leon Ave., Suite 417, San Juan, PR 00907-4127.

8.3.3 Region 3: DE, DC, MD, PA, VA, WV

EPA Region 3, Water Protection Division (3WP13), Storm Water Coordinator, 1650 Arch Street, Philadelphia, PA 19103.

8.3.4 Region 4: AL, FL, GA, KY, MS, NC, SC, TN

Environmental Protection Agency, Region 4, Clean Water Act Enforcement Section, Water Programs Enforcement Branch, Water Management Division, Atlanta Federal Center, 61 Forsyth Street, SW., Atlanta, GA 30303.

8.3.5 Region 5: IL, IN, MI, MN, OH, WI

(Coverage Not Available Under This Permit.)

8.3.6 Region 6: AR, LA, OK, TX, NM

(Except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)

United States EPA, Region 6, Storm Water Staff, Enforcement and Compliance Assurance Division (GEN-WC), EPA SW MSGP, P.O. Box 50625, Dallas, TX 75205.

8.3.7 Region 7:

(Coverage Not Available Under This Permit.)

8.3.8 Region 8: CO, MT, ND, SD, WY, UT

(Except see Region 9 for Goshute Reservation and Navajo Reservation lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE

United States EPA, Region 8, Ecosystems Protection Program (8EPR—

EP), Storm Water Staff, 999 18th Street, Suite 300, Denver, CO 80202-2466.

8.3.9 Region 9: AZ, CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, Fort McDermitt Reservation in OR

United States EPA, Region 9, Water Management Division, WTR-5, Storm Water Staff, 75 Hawthorne Street, San Francisco, CA 94105.

8.3.10 Region 10: ID, WA, OR

(Except see Region 9 for Fort McDermitt Reservation.)

United States EPA, Region 10, Office of Water OW-130, 1200 6th Avenue, Seattle, WA 98101.

8.4 State, Tribal, and Other Agencies

See Part 13 for addresses of States or Tribes that require submission of information to their agencies.

9. Standard Permit Conditions

9.1 Duty To Comply

9.1.1 You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

9.1.2 *Penalties for Violations of Permit Conditions:* The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (**Federal Register**: December 31, 1996, Volume 61, Number 252, pages 69359-69366, as corrected, March 20, 1997, Volume 62, Number 54, pages 13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every four years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties listed below were adjusted for inflation starting in 1996.

9.1.2.1 *Criminal Penalties.*

9.1.2.1.1 *Negligent Violations.*

The CWA provides that any person who negligently violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day

of violation, or by imprisonment for not more than 1 year, or both.

9.1.2.1.2 *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

9.1.2.1.3 *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

9.1.2.1.4 *False Statement.* The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See section 309(c)(4) of the Clean Water Act.)

9.1.2.2 *Civil Penalties.* The CWA provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$27,500 per day for each violation.

9.1.2.3 *Administrative Penalties.* The CWA provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

9.1.2.3.1 *Class I Penalty.* Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27,500.

9.1.2.3.2 *Class II Penalty.* Not to exceed \$11,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$137,500.

9.2 Continuation of the Expired General Permit

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and effect. Any permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

9.2.1 Reissuance or replacement of this permit, at which time you must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or

9.2.2 Your submittal of a Notice of Termination; or

9.2.3 Issuance of an individual permit for your discharges; or

9.2.4 A formal permit decision by the Director not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

9.3 Need To Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9.4 Duty To Mitigate

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

9.5 Duty To Provide Information

You must furnish to the Director or an authorized representative of the Director any information which is requested to determine compliance with this permit or other information.

9.6 Other Information

If you become aware that you have failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, you must promptly submit such facts or information.

9.7 Signatory Requirements

All Notices of Intent, Notices of Termination, Storm Water Pollution Prevention Plans, reports, certifications or information either submitted to the Director or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by you, must be signed as follows:

9.7.1 All notices of intent and notices of termination must be signed as follows:

9.7.1.1 *For a corporation:* By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

9.7.1.2 *For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

9.7.1.3 *For a municipality, State, Federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

9.7.2 All reports required by this permit and other information must be signed as follows:

9.7.2.1 All reports required by this permit and other information requested by the Director or authorized representative of the Director must be signed by a person described in Part 9.7.1 or by a duly authorized representative of that person.

9.7.2.2 A person is a duly authorized representative only if the authorization is made in writing by a person described in Part 9.7.1 and submitted to the Director.

9.7.2.3 The authorization must specify either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or

an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

9.7.3 *Changes to Authorization.* If the information on the NOI filed for permit coverage is no longer accurate because a different operator has responsibility for the overall operation of the facility, a new Notice of Intent satisfying the requirements of Part 2 must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative. The change in authorization must be submitted within the time frame specified in Part 2.1, and sent to the address specified in Part 2.4.

9.7.4 *Certification.* Any person signing documents under Part 9.7 must make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9.8 Penalties for Falsification of Reports

Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or by both.

9.9 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve you from any responsibilities, liabilities, or penalties to which you are or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

9.10 Property Rights

The issuance of this permit does not convey any property rights of any sort,

nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

9.11 Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

9.12 Requiring Coverage Under an Individual Permit or an Alternative General Permit

9.12.1 Eligibility for this permit does not confer a vested right to coverage under the permit.

The Director may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Director to take action under this paragraph. Where the Director requires a permittee authorized to discharge under this permit to apply for an individual NPDES permit, the Director will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for you to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit will automatically terminate. Applications must be submitted to the appropriate Regional Office indicated in Part 8.3 of this permit. The Director may grant additional time to submit the application upon request of the applicant. If a permittee fails to submit in a timely manner an individual NPDES permit application as required by the Director under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Director for application submittal.

9.12.2 Any permittee authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, you must submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Director at the address for the appropriate Regional

Office indicated in Part 8.3 of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by you are adequate to support the request.

9.12.3 When an individual NPDES permit is issued to a permittee otherwise subject to this permit, or the permittee is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Director.

9.12.4 The Director's notification that coverage under an alternative permit is required does not imply that any discharge that did not or does not meet the eligibility requirements of Part 1.2 is or has been covered by this permit.

9.13 State/Tribal Environmental Laws

9.13.1 Nothing in this permit will be construed to preclude the institution of any legal action or relieve you from any responsibilities, liabilities, or penalties established pursuant to any applicable State/Tribal law or regulation under authority preserved by section 510 of the Act.

9.13.2 No condition of this permit releases you from any responsibility or requirements under other environmental statutes or regulations.

9.14 Proper Operation and Maintenance

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by you to achieve compliance with the conditions of this permit and with the requirements of Storm Water Pollution Prevention Plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of this permit.

9.15 Inspection and Entry

You must allow the Director or an authorized representative of EPA, the State/Tribe, or, in the case of a facility which discharges through a municipal separate storm sewer, an authorized representative of the municipal owner/operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

9.15.1 Enter upon the your premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

9.15.2 Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

9.15.3 Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

9.16 Monitoring and Records

9.16.1 *Representative Samples/Measurements.* Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

9.16.2 *Retention of Records.*

9.16.2.1 You must retain records of all monitoring information, and copies of all monitoring reports required by this permit for at least three (3) years from the date of sample, measurement, evaluation or inspection, or report. This period may be extended by request of the Director at any time. Permittees must submit any such records to the Director upon request.

9.16.2.2 You must retain the Storm Water Pollution Prevention Plan developed in accordance with Part 4 of this permit, including the certification required under Section 2.2.4.3 of this permit, for at least 3 years after the last modification or amendment is made to the plan.

9.16.3 *Records Contents.* Records of monitoring information must include:

9.16.3.1 The date, exact place, and time of sampling or measurements;

9.16.3.2 The initials or name(s) of the individual(s) who performed the sampling or measurements;

9.16.3.3 The date(s) analyses were performed;

9.16.3.4 The time(s) analyses were initiated;

9.16.3.5 The initials or name(s) of the individual(s) who performed the analyses;

9.16.3.6 References and written procedures, when available, for the analytical techniques or methods used; and

9.16.3.7 The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

9.16.4 *Approved Monitoring Methods.* Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

9.17 Permit Actions

This permit may be modified; revoked and reissued; or terminated for cause. Your filing of a request for a permit modification; revocation and reissuance; or your submittal of a notification of planned changes or anticipated non-compliance does not automatically stay any permit condition.

10. Reopener Clause

10.1 Water Quality Protection

If there is evidence indicating that the storm water discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water quality standard, you may be required to obtain an individual permit or an alternative general permit in accordance with Part 3.3 of this permit, or the permit may be modified to include different limitations and/or requirements.

10.2 Procedures for Modification or Revocation

Permit modification or revocation will be conducted according to 40 CFR 122.62, 122.63, 122.64 and 124.5.

11. Transfer or Termination of Coverage

11.1 Transfer of Permit Coverage

Automatic transfers of permit coverage under 40 CFR 122.61(b) are not allowed for this general permit.

11.1.1 Transfer of coverage from one operator to a different operator (e.g., facility sold to a new company): the new owner/operator must complete and file an NOI in accordance with Part 1.3 at least 2 days prior to taking over operational control of the facility. The old owner/operator must file an NOT (Notice of Termination) within thirty (30) days after the new owner/operator has assumed responsibility for the facility.

11.1.2 Simple name changes of the permittee (e.g., Company "A" changes name to "ABC, Inc." or Company "B" buys out Company "A") may be done by filing an amended NOI referencing the facility's assigned permit number and requesting a simple name change.

11.2 Notice of Termination (NOT)

You must submit a completed Notice of Termination (NOT) that is signed in accordance with Part 9.7 when one or more of the conditions contained in Part 1.4 (Terminating Coverage) have been met. The NOT form found in Addendum E will be used unless it has been replaced by a revised version by the Director. The Notice of Termination must include the following information:

11.2.1 The NPDES permit number for the storm water discharge identified by the Notice of Termination;

11.2.2 An indication of whether the storm water discharges associated with industrial activity have been eliminated (*i.e.*, regulated discharges of storm water are being terminated); you are no longer an operator of the facility; or you have obtained coverage under an alternative permit;

11.2.3 The name, address and telephone number of the permittee submitting the Notice of Termination;

11.2.4 The name and the street address (or a description of location if no street address is available) of the facility for which the notification is submitted;

11.2.5 The latitude and longitude of the facility; and

11.2.6 The following certification, signed in accordance with Part 9.7 (signatory requirements) of this permit. For facilities with more than one permittee and/or operator, you need only make this certification for those portions of the facility where the you were authorized under this permit and not for areas where the you were not an operator:

I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that authorized by a general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

11.3 Addresses

All Notices of Termination must be submitted using the form provided by the Director (or a photocopy thereof) to the address specified on the NOT form.

11.4 Facilities Eligible for "No Exposure" Exemption for Storm Water Permitting

By filing a certification of "No Exposure" under 40 CFR 122.26(g), you are automatically removed from permit coverage and a NOT to terminate permit coverage is not required.

12. Definitions

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Commencement of Construction the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

Control Measure as used in this permit, refers to any Best Management Practice or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

CWA means the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*

Director means the Regional Administrator of the Environmental Protection Agency or an authorized representative.

Discharge when used without qualification means the "discharge of a pollutant."

Discharge of Storm Water Associated with Construction Activity as used in this permit, refers to a discharge of pollutants in storm water runoff from areas where soil disturbing activities (*e.g.*, clearing, grading, or excavation), construction materials or equipment storage or maintenance (*e.g.*, fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (*e.g.*, concrete or asphalt batch plants) are located. (See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15) for the two regulatory definitions on regulated storm water associated with construction sites).

Discharge of Storm Water Associated with Industrial Activity is defined at 40 CFR 122.26(b)(14).

Facility or Activity means any NPDES "point source" or any other facility

or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

Flow-Weighted Composite Sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Indian country, as defined in 18 USC 1151, means: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Industrial Activity as used in this permit refers to the eleven categories of industrial activities included in the definition of "discharges of storm water associated with industrial activity".

Industrial Storm Water as used in this permit refers to storm water runoff associated with the definition of "discharges of storm water associated with industrial activity".

Large and Medium Municipal Separate Storm Sewer Systems are defined at 40 CFR 122.26(b)(4) and (7), respectively and means all municipal separate storm sewers that are either:

1. Located in an incorporated place (city) with a population of 100,000 or more as determined by the 1990 Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR 122); or
2. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR 122); or
3. Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium

municipal separate storm sewer system.

Municipal Separate Storm Sewer is defined at 40 CFR 122.26.

No exposure means that all industrial materials or activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff.

NOI means Notice of Intent to be covered by this permit (see Part 2 of this permit.)

NOT means Notice of Termination (see Part 11.2 of this permit).

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant is defined at 40 CFR 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

Special Aquatic Sites, as defined at 40 CFR 230.3(q-1), means those sites identified in 40 CFR 230 Subpart E. They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. (See 40 CFR 230.10(a)(3)).

Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Associated with Industrial Activity refers to storm water, that if allowed to discharge, would constitute a "discharge of storm water associated with industrial activity" as defined at 40 CFR

122.26(b)(14) and incorporated here by reference.

Waters of the United States means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate "wetlands";
3. All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1. through 6. of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds for steam electric generation stations per 40 CFR 423) which also meet the criteria of this definition) are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

You and **Your** as used in this permit is intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you must submit" means the permittee must submit something for that particular

facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

13. Permit Conditions Applicable to Specific States, Indian Country Lands, or Territories

The provisions of Part 13 provide modifications or additions to the applicable conditions of Parts 1 through 12 of this permit to reflect specific additional conditions required as part of the State or Tribal CWA Section 401 certification process, or Coastal Zone Management Act certification process, or as otherwise established by the permitting authority. The additional revisions and requirements listed below are set forth in connection with, and only apply to, the following States, Indian country lands and Federal facilities.

13.1 Region 1

13.1.1 **CTR05*##I**: Indian country lands within the State of Connecticut.

13.1.2 **MAR05*###**: Commonwealth of Massachusetts, except Indian country lands.

13.1.2.1 Discharges covered by the general permit must comply with the provisions of 314 CMR 3.00; 314 CMR 4.00; 314 CMR 9.00; and 310 CMR 10.00 and any other related policies adopted under the authority of the Massachusetts Clean Waters Act, M.G.L. c.21, ss. 26-53 and Wetlands Protection Act, M.G.L., s.40. Specifically, new facilities or the redevelopment of existing facilities subject to this permit must comply with applicable storm water performance standards prescribed by state regulation or policy. A permit under 314 CMR 3.04 is not required for existing facilities which meet state storm water performance standards. An application for a permit under 314 CMR 3.00 is required only when required under 314 CMR 3.04(2)(b) (designation of a discharge on a case-by-case basis) or is otherwise identified in 314 CMR 3.00 or Department policy as a discharge requiring a permit application. Department regulations and policies may be obtained through the State House Bookstore or online at www.magnet.state.ma.us/dep.

13.1.2.2 The department may request a copy of the Storm Water Pollution Prevention Plan (SWPPP) or conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.

13.1.2.3 The results of any quarterly monitoring required by this permit must be sent to the appropriate Regional

Office of the Department where the monitoring identifies violations of effluent limits or benchmarks for any parameter for which monitoring is required under this permit.

13.1.3 *MAR05*##I*: Indian country lands within the Commonwealth of Massachusetts.

13.1.4 *MER05*###*: State of Maine, except Indian country lands.

13.1.5 *MER05*##I*: Indian country lands within the State of Maine.

13.1.6 *NHR05*###*: State of New Hampshire.

13.1.7 *RIR05*##I*: Indian country lands within the State of Rhode Island.

13.1.8 *VTR05*##F*: Federal Facilities in the State of Vermont.

13.2. Region 2

13.2.1 *PRR05*###*: The Commonwealth of Puerto Rico. No additional requirements

13.3 Region 3

13.3.1 *DCR05*###*: The District of Columbia.

13.3.2 *DER05*##F*: Federal Facilities in the State of Delaware.

13.4 Region 4

13.4.1 *ALR05*##I*: Indian country lands within the State of Alabama.

13.4.2 *FLR05*##I*: Indian country lands within the State of Florida.

13.4.3 *MSR05*##I*: Indian country lands within the State of Mississippi.

13.4.4 *NCR05*##I*: Indian country lands within the State of North Carolina.

13.5 Region 5

Permit coverage not available.

13.6 Region 6

13.6.1 *LAR05*##I*: Indian Country lands within the State of Louisiana. No additional requirements.

13.6.2 *NMR05*###*: The State of New Mexico, except Indian Country lands.

13.6.2.1 *Discharges to Water Quality Impaired/Water Quality Limited Waters*: Any operator who intends to obtain authorization under the MSGP for all new and existing storm water discharges to water quality-impaired (303(d)) waters (see <http://www.nmenv.state.nm.us/>) from facilities where there is a reasonable potential to contain pollutants for which the receiving water is impaired must satisfy the following conditions prior to the authorization. Signature of the NOI (which includes certifying eligibility for permit coverage) will be deemed the operator's certification that this eligibility requirement has been satisfied.

13.6.2.1.1 Prior to submitting a Notice of Intent (NOI) for coverage

under the MSGP, provide an estimate of pollutant loads in storm water discharges from the facility to the New Mexico Environment Department, Surface Water Quality Bureau (SWQB). This estimate must include the documentation upon which the estimate is based (e.g., sampling data from the facility, sampling data from substantially identical outfalls at similar facilities, modeling, etc.). Existing facilities must base this estimate on actual analytical data, if available.

13.6.2.1.2 Eligibility Requirements for New Discharges.

13.6.2.1.2.1 If a Total Maximum Daily Load (TMDL) has been developed, permit coverage is available only if the operator has received notice from the SWQB confirming eligibility.

Note: Following receipt of the information required under Part 13.6.2.1.1, SWQB anticipates using the following process in making eligibility determinations for new discharges into 303(d) waters where a TMDL has been developed:

- SWQB will notify the facility operator and EPA that the estimated pollutant load is consistent with the TMDL and that the proposed storm water discharges meet the eligibility requirements of Part 1.2.3.8 of the MSGP and may be authorized under this NPDES permit; or

- SWQB will notify the facility operator and EPA that the estimated pollutant load is not consistent with the TMDL and that the proposed storm water discharges do not meet the eligibility requirements of Part 1.2.3.8 of the MSGP and can not be authorized under this NPDES permit.

13.6.2.1.2.2 If a Total Maximum Daily Load (TMDL) has not been developed, permit coverage is not available under this permit for discharges to 303(d) waters and the operator must seek coverage under a separate permit.

Note: Following receipt of the information required under Part 13.6.2.1.1, SWQB anticipates using the following process in making eligibility determinations for new discharges into 303(d) waters where a TMDL has not yet been developed: SWQB will notify the facility operator and EPA that the proposed storm water discharges do not meet the eligibility requirements of Part 1.2.3.8 of the MSGP and can not be authorized under this NPDES permit.

13.6.2.1.3 *Eligibility Requirements for Existing Discharges*:

13.6.2.1.3.1 If a Total Maximum Daily Load (TMDL) has been developed, permit coverage is available only if the operator has received notice from the SWQB confirming eligibility.

Note: Following receipt of the information required under Part 13.6.2.1.1, SWQB anticipates using the following process in

making eligibility determinations for existing discharges into 303(d) waters where a TMDL has been developed:

- SWQB will notify the facility operator and EPA that the estimated pollutant load is consistent with the TMDL and that the proposed storm water discharges meet the eligibility requirements of Part 1.2.3.8 of the MSGP and may be authorized under this NPDES permit; or

- SWQB will notify the facility operator and EPA that the estimated pollutant load is not consistent with the TMDL and that the proposed storm water discharges do not meet the eligibility requirements of Part 1.2.3.8 of the MSGP and can not be authorized under this NPDES permit.

13.6.2.1.3.2 If a Total Maximum Daily Load (TMDL) has not been developed at the time of permit authorization, but is later developed during the term of this permit and identifies existing permitted discharges as having a reasonable potential to contain pollutants for which the receiving water is impaired, these discharges shall no longer be authorized by this permit unless, following notification by the SWQB:

- The operator completes revisions to his/her Storm Water Pollution Prevention Plan (SWPPP) to include additional and/or modified Best Management Practices (BMPs) designed to comply with any applicable Waste Load Allocation (WLA) established his/her discharges within 14 calendar days following notification by SWQB; and

- The operator implements the additional and/or modified BMPs before the next anticipated discharge following revision of the SWPPP; and

- A report is submitted to SWQB which documents actions taken to comply with this condition, including estimated pollutant loads, within 30 calendar days following implementation of the additional and/or modified BMPs.

13.6.2.1.4 *Additional Monitoring*—perform analytical monitoring for each outfall at least annually for any pollutant(s) for which the 303(d) water is impaired where there is a reasonable potential for discharges to contain any or all of these pollutants. Submit monitoring results to SWQB within 45 calendar days following sample collection. These monitoring requirements are not eligible for any waivers listed elsewhere in the permit.

13.6.2.2 *Permit Eligibility Regarding Protection of Water Quality Standards and Compliance with State Anti-degradation Requirements*: Storm water discharges associated with industrial activity to 303(d) waters as well as all other "waters of the State" that SWQB has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard

and/or that do not comply with the applicable anti-degradation provisions of the State's WQS are not authorized by this permit.

Note: Upon receipt of this determination, NMED anticipates that, within a reasonable period of time, EPA will notify the general permittee to apply for and obtain an individual NPDES permit for these discharges per 40 CFR 122.28(b)(3).

13.6.2.3 Signed Copies of discharge monitoring reports, individual permit applications, the data and reports addressed in Part 13.6.2.1, and all other reports required herein, shall be submitted to the appropriate state office address: New Mexico—Program Manager, Point Source Regulation Section, Surface Water Quality Bureau, New Mexico Environment Department, P.O. Box 26110, Santa Fe, New Mexico 87502.

13.6.3. NMR05*##I: Indian Country lands in the State of New Mexico, except Navajo Reservation lands (see Region 9) and Ute Mountain Reservation lands (see Region 8).

13.6.3.1 *Pueblo of Isleta* The following conditions apply only to discharges on the Pueblo of Isleta.

13.6.3.1.1 Copies of "Certification of Eligibility of Coverage" under Part 1.2.3.6.3 (Endangered Species) and Part 1.2.3.7 (Historical Properties), and their justifications, must be provided to the Tribe 10 days prior to filing the Notice of Intent (NOI).

13.6.3.1.2 A copy of the Storm Water Pollution Prevention Plan (SWPPP) must be provided to the Tribe 5 days prior to filing the NOI.

13.6.3.1.3 A copy of the NOI must be provided to the Tribe at the same time it is sent to the Environmental Protection Agency.

13.6.3.1.4 A copy of the Notice of Termination (NOT) must be provided to the Tribe at the same time it is sent to the Environmental Protection Agency.

13.6.3.1.5 Any notice of release of hazardous substances (Part 3.1.2) shall also be sent to the Tribe at the same time it is sent to the Environmental Protection Agency. Notification of a release of hazardous substances shall also be made to the Pueblo's Police Department (505-869-3030) or Governor's Office (505-869-3111) or Environment Department (505-869-5748).

13.6.3.1.6 Copies of all "Routine Inspection Reports: (Part 4.2.7.2.1.5) and "Comprehensive Inspection Reports" (Part 4.9) shall be sent to the Tribe within 5 days of completion.

13.6.3.1.7 All analytical data (e.g., Discharge Monitoring Reports, etc.) shall be provided to the Tribe at the same time it is provided to the EPA.

13.6.3.1.8 Exceedance of any EPA-established "Benchmark Value" for any pollutant will require quarterly monitoring for that pollutant until such time as analytical results from 4 consecutive quarters are below the "Benchmark."

13.6.3.1.9 Any permittee in Sector F shall monitor for all Clean Water Act Section 307(a) priority pollutants used in any of their processes. Monitoring shall be on a quarterly basis.

13.6.3.1.10 Any permittee in Sector M shall monitor for total oil & grease, glycols, and those solvents regulated under Safe Drinking Water Act mandates at 40 CFR 141.61(a) in addition to those parameters identified in Table M-1. Monitoring shall be on a quarterly basis.

13.6.3.1.11 Any permittee in Sector N shall monitor for PCBs in addition to those parameters identified in Table N-1. Monitoring shall be on a quarterly basis.

13.6.3.1.12 All written reports shall be sent to: Director, Environment Department, Pueblo of Isleta, Isleta, NM 87022.

13.6.3.2 *Pueblo of Nambe*. The following conditions apply only to discharges on the Pueblo of Nambe. No additional requirements.

13.6.3.3 *Pueblo of Picuris*. The following conditions apply only to discharges on the Pueblo of Picuris.

13.6.3.4 *Pueblo of Pojoaque*. The following conditions apply only to discharges on the Pueblo of Pojoaque.

13.6.3.4.1 Notices of Intent (NOI) and notices of Termination (NOT) shall be submitted to the Pueblo of Pojoaque Environment Department at the same time they are submitted to EPA.

13.6.3.4.2 Storm Water Pollution Prevention Plans (SWPPP) shall be submitted to the Pueblo of Pojoaque Environment Department 30 days before commencement of the project.

13.6.3.4.3 If requested by the Pueblo of Pojoaque Environment Department (PPED), the permittee shall provide additional information necessary for a "case by case" eligibility determination to assure compliance with Pojoaque Pueblo Water Quality Standards.

Note: Upon receipt of an determination by the Pueblo of Pojoaque that discharges from a facility have the reasonable potential to be causing or contributing to a violation of Pojoaque Pueblo Water Quality Standards, EPA would notify the general permittee to either improve their Storm Water Pollution Prevention Plan to achieve compliance with Pojoaque Pueblo Water Quality Standards or apply for and obtain an individual NPDES permit for these discharges per 40 CFR 122.28(b)(3).

13.6.3.4.4 All written reports shall be sent to: Pueblo of Pojoaque

Environment Department, 2 W. Gutierrez, Santa Fe, NM 87501; Phone (505) 455-2087; FAX (505) 455-2177.

13.6.3.5 *Pueblo of San Juan*. The following conditions apply only to discharges on the Pueblo of San Juan.

13.6.3.5.1 Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) shall be provided to the Pueblo five (5) days prior to the time it is provided to the Environmental Protection Agency. A copy of the Storm Water Pollution Prevention Plan shall be provided to the Pueblo five (5) days prior to the time the NOI is submitted to the Environmental Protection Agency.

13.6.3.5.2 All analytical data (e.g., Discharge Monitoring Reports, etc.) shall be provided to the Pueblo at the same time it is provided to the Environmental Protection Agency. Monitoring activities must be coordinated with the Director of the Environment Department to insure consistency with the Pueblo of San Juan Surface Water Quality Monitoring Program.

13.6.3.5.3 Copies of all written reports required under the permit shall be sent to: Director, Environment Department, San Juan Pueblo, P.O. Box 717, San Juan Pueblo, NM 87566. For questions or coordination, you may contact the Director at (505) 852-4212.

13.6.3.6 *Pueblo of Sandia*. The following conditions apply only to discharges on the Pueblo of Sandia.

13.6.3.6.1 Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) shall be provided to the Pueblo at the same time it is provided to the Environmental Protection Agency. A copy of the Storm Water Pollution Prevention Plan must also be provided to the Pueblo at the time the NOI is submitted.

13.6.3.6.2 All analytical data (e.g., Discharge Monitoring Reports, etc) shall be provided to the Pueblo at the same time it is provided to the Environmental Protection Agency.

13.6.3.6.3 All written reports shall be sent to: Director, Environment Department, Pueblo of Sandia, Box 6008, Bernalillo, NM 87004.

13.6.3.7 *Pueblo of Tesuque*. The following conditions apply only to discharges on the Pueblo of Tesuque. No additional requirements.

13.6.3.8 *Santa Clara Pueblo*. The following conditions apply only to discharges on the Santa Clara Pueblo. No additional requirements.

13.6.3.9 *All Other Indian Country lands in New Mexico*. No additional requirements.

13.6.4. OKR05*##I: Indian Country lands within the State of Oklahoma. No additional requirements.

13.6.5. OKR05*##F: Facilities in the State of Oklahoma not under the jurisdiction of the Oklahoma Department of Environmental Quality, except those on Indian Country lands.

13.6.5.1 Ineligible Discharges to the Oklahoma Scenic Rivers System and Outstanding Resource Waters—New or proposed discharges to the Oklahoma Scenic Rivers System, including the

Illinois River, Flint Creek, Barren Fork Creek, Mountain Fork, Little Lee Creek, and Big Lee Creek or to any water designated an "Outstanding Resource Water" (ORW) in Oklahoma's Water Quality Standards are not eligible for coverage under the MSGP. Existing discharges of storm water in these watersheds may be permitted under the MSGP only from point sources existing as of June 25, 1992, whether or not such storm water discharges were permitted as point sources prior to June 25, 1992.

13.6.6. TXR05*###: The State of Texas, except Indian Country lands.
13.6.6.1 The following limitations, independently required under the Texas Water Quality Standards (31 TAC 319.22 and 319.23), apply to discharges authorized by the permit:

13.6.6.1.1 *All Discharges to Inland Waters*: The maximum allowable concentrations of each of the hazardous metals, stated in terms of milligrams per liter (mg/l), for discharges to inland waters are as follows:

Total metal	Monthly average	Daily composite	Single grab
Arsenic	0.1	0.2	0.3
Barium	1.0	2.0	4.0
Cadmium	0.05	0.1	0.2
Chromium	0.5	1.0	5.0
Copper	0.5	1.0	2.0
Lead	0.5	1.0	1.5
Manganese	1.0	2.0	3.0
Mercury	0.005	0.005	0.01
Nickel	1.0	2.0	3.0
Selenium	0.05	0.1	0.2
Silver	0.05	0.1	0.2
Zinc	1.0	2.0	6.0

13.6.6.1.2 *All Discharges to Tidal Waters*: The maximum allowable concentrations of each of the hazardous metals, stated in terms of milligrams per liter (mg/l), for discharges to tidal waters are as follows:

Total metal	Monthly average	Daily composite	Single grab
Arsenic	0.1	0.2	0.3
Barium	1.0	2.0	4.0
Cadmium	0.1	0.2	0.3
Chromium	0.5	1.0	5.0
Copper	0.5	1.0	2.0
Lead	0.5	1.0	1.5
Manganese	1.0	2.0	3.0
Mercury	0.005	0.005	0.01
Nickel	1.0	2.0	3.0
Selenium	0.10	0.2	0.3
Silver	0.05	0.1	0.2
Zinc	1.0	2.0	6.0

13.6.6.1.3 Definitions:
Inland Waters—all surface waters in the State other than "tidal waters" as defined below.

Tidal Waters—those waters of the Gulf of Mexico within the jurisdiction of the State of Texas, bays and estuaries thereto, and those portions of the river systems which are subject to the ebb and flow of the tides, and to the intrusion of marine waters.

13.6.7. TXR05*##I: Indian Country lands within the State of Texas. No additional requirements.

13.7. *Region 7. Permit Coverage Not Available.*

13.8. *Region 8.*

13.8.1. COR05*##F: Federal Facilities in the State of Colorado, except those located on Indian country lands.

13.8.2. COR05*##I: Indian country lands within the State of Colorado, including the portion of the Ute Mountain Reservation located in New Mexico.

13.8.3. MTR05*##I: Reserved

13.8.4. NDR05*##I: Indian country lands within the State of North Dakota, including that portion of the Standing Rock Reservation located in South Dakota except for the Lake Traverse Reservation which is covered under South Dakota permit SDR05*##I listed below.

13.8.5. SDR05*##I: Indian country lands within the State of South Dakota, including the portion of the Pine Ridge Reservation located in Nebraska and the portion of the Lake Traverse Reservation located in North Dakota except for the Standing Rock Reservation which is

covered under North Dakota permit NDR05*##I listed above.

13.8.6. UTR05*##I: Indian country lands in the State of Utah, except Goshute and Navajo reservation lands (see Region 9).

13.8.7. WYR05*##I: Indian country lands in the State of Wyoming.

13.9. *Region 9.*

13.9.1. ASR05*###: The Island of American Samoa.

13.9.1.1. Copies of NOIs shall also be submitted to the American Samoa Environmental Protection Agency at the following address concurrently with NOI submittal to EPA: American Samoa Environmental Protection Agency, Executive Office Building, Pago Pago, American Samoa 96799.

13.9.1.2. Updated storm water pollution prevention plans must be

submitted to the American Samoa Environmental Protection Agency at the following address for review and approval as soon as they are completed: American Samoa Environmental Protection Agency, Executive Office Building, Pago Pago, American Samoa 96799.

13.9.2. AZR05*###: The State of Arizona, except Indian country lands.

13.9.2.1. Discharges authorized by this permit shall not cause or contribute to a violation of any applicable water quality standard of the State of Arizona (Arizona Administrative Code, Title 18, Chapter 11).

13.9.2.2. Notices of Intent (NOIs) shall also be submitted to the State of Arizona Department of Environmental Quality at the following address: Storm Water Coordinator, Arizona Department of Environmental Quality, 3033 N. Central Avenue, Phoenix, Arizona 85012. NOIs submitted to the State of Arizona shall include the well registration number if storm water associated with industrial activity is discharged to a dry well or an injection well.

13.9.2.3. Notices of Termination (NOTs) shall also be submitted to the State of Arizona Department of Environmental Quality at the following address: Storm Water Coordinator, Arizona Department of Environmental Quality, 3033 N. Central Avenue, Phoenix, Arizona 85012.

13.9.2.4. For facilities which submit a no exposure certification in accordance with Part 1.5 of the permit, the operator shall submit a copy of the no exposure certification to the State of Arizona Department of Environmental Quality at the following address: Storm Water Coordinator, Arizona Department of Environmental Quality, 3033 N. Central Avenue, Phoenix, Arizona 85012.

13.9.2.5. SARA Section 313 (Community Right to Know) facilities shall have the following requirement: Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of such chemicals. Appropriate measures to minimize discharges of Section 313 chemicals shall include: provision of secondary containment for at least the entire contents of the largest tank plus sufficient freeboard to allow for the 25-year, 24-hour precipitation event; a strong spill contingency and integrity testing plan, and/or other equivalent measures.

13.9.2.6. Delineation of Facility Areas Within the 100-Year Floodplain. All facilities or any portion of a facility that is located at or within the 100-year floodplain shall be delineated on the

site map. The base flood elevation, if known, shall also be reported.

13.9.2.7. Facilities subject to monitoring and reporting requirements shall also submit Discharge Monitoring Report Form(s) (DMR) and other required monitoring information to the State of Arizona Department of Environmental Quality at the following address: Storm Water DMR Coordinator, Arizona Department of Environmental Quality, 3033 N. Central Avenue Phoenix, Arizona 85012.

13.9.2.8. The term "Significant Sources of Non-Storm Water" includes, but is not limited to discharges which could cause or contribute to violations of water quality standards of the State of Arizona, and discharges which could include releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see CFR 302.4).

13.9.2.9. The term "Base Flood Elevation" as defined by Federal Emergency Management Agency (FEMA) is the height of the base (100-year) flood in relation to a specified datum, usually the National Geodetic Vertical Datum of 1929 of North American Vertical Datum of 1988. This is the elevation of the 100-year flood waters relative to "mean sea level."

13.9.2.10. The term "100-year flood" means the flood having a one percent chance of being equaled or exceeded in magnitude in any given year.

13.9.2.11. The term "100-year floodplain" means that area adjoining a river, stream, or watercourse covered by water in the event of a 100-year flood.

13.9.3. AZR05*##1: Indian country lands within the State of Arizona, including Navajo Reservation lands in New Mexico and Utah.

13.9.3.1. White Mountain Apache Tribe. The following condition applies only on the White Mountain Apache Tribe: All NOIs for proposed storm water discharge coverage shall be provided to the following address: Tribal Environmental Planning Office, Attn: Brenda Pusher-Begay, P.O. Box 1000, Whiteriver, AZ 85941.

13.9.4. CAR05*##1: Indian country lands within the State of California No additional requirements.

13.9.5. GUR05*###: The Island of Guam.

13.9.5.1. Facilities ineligible for Multi-Sector General Permit coverage which are required to submit an individual NPDES permit application must send a copy to the following address at the time of submittal to EPA: Guam Environmental Protection

Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.

13.9.5.2. Copies of NOIs shall also be submitted to the following address concurrently with NOI submittal to EPA: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.

13.9.5.3. Permittees required by the Director to submit an individual NPDES permit application or alternative general NPDES permit application must send a copy to the following address at the time of submittal to EPA: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.

13.9.6. JAR05*###: Johnston Atoll. No additional requirements.

13.9.7. MWR05*###: Midway Island and Wake Island. No additional requirements.

13.9.8. NIR05*###: Commonwealth of the Northern Mariana Islands (CNMI)

13.9.8.1. All conditions and requirements set forth in the USEPA final NPDES MSGP must be complied with.

13.9.8.2. A storm water pollution prevention plan (SWPPP) for storm water discharges associated with industrial activity must be approved by the Director of the CNMI DEQ prior to the submission of the NOI to USEPA. The CNMI address for the submittal of the SWPPP for approval is: Commonwealth of the Northern Mariana Islands, Office of the Governor, Director, Division of Environmental Quality (DEQ), P.O. Box 501304 C.K., Saipan, MP 96950-1304.

13.9.8.3. An NOI to be covered by the storm water MSGP for discharges associated with industrial activity must be submitted to CNMI DEQ (use above address) and USEPA, Region 9, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from CNMI DEQ.

13.9.8.4. The NOI must be postmarked seven (7) calendar days prior to any stormwater discharges and a copy must be submitted to the Director of CNMI DEQ (use above address) no later than seven (7) calendar days prior to any stormwater discharges.

13.9.8.5. All monitoring reports required by the MSGP must be submitted to CNMI DEQ (use above address).

13.9.8.6. In accordance with section 10.3(h) and (i) of CNMI water quality standards, CNMI DEQ reserves the right to deny coverage under the MSGP and to require submittal of an application for an individual NPDES permit based on a review of the NOI or other information made available to the Director.

13.9.9. NVR05*##I: Indian country lands within the State of Nevada, including the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah. No additional requirements.

13.10. *Region 10.*

13.10.1. (The terms and conditions of the 1995 Multi-Sector General Permit are effective for facilities in the State of Alaska through February 9, 2001.)

13.10.2. AKR05*##I: Indian country lands within the State of Alaska.

13.10.3. IDR05*### The State of Idaho, except Indian country lands.

13.10.4. IDR05*##I: Indian country lands within the State of Idaho, except Duck Valley Reservation lands (see Region 9).

13.10.5. ORR05*##I: Indian country lands in the State of Oregon except Fort McDermitt Reservation lands (see Region 9).

13.10.6. WAR05*##I: Indian country lands within the State of Washington

13.10.6.1 Permittees on Chehalis Reservation lands must also meet the following conditions:

1. The permittee shall be responsible for achieving compliance with Confederated Tribes of Chehalis Reservation's Water Quality Standards, and

2. The permittee shall be responsible for submitting all Storm Water Pollution Prevention Plans to the Chehalis Tribal Department of Natural Resources at the following address for review and approval prior to the beginning of any discharge activities taking place: Confederated Tribes of Chehalis Reservation, Department of Natural Resources, 420 Howanut Road, Oakville, WA 98568.

13.10.6.2 Permittees on Puyallup Reservation lands must also meet the following conditions:

1. The permittee shall be responsible for achieving compliance with Puyallup Tribe's Water Quality Standards;

2. The permittee shall submit a copy of the Notice of Intent to be covered by the general permit to the Puyallup Tribe Environmental Department at the address listed below at the same time it is submitted to U.S. EPA;

3. The permittee shall be responsible for submitting all Storm Water Pollution Prevention Plans to the Puyallup Tribe Environmental Department at the following address for review and approval prior to the beginning of any discharge activities taking place: Puyallup Tribe Environmental Department, 2002 East 28th Street, Tacoma, WA 98404.

13.10.7. WAR05*##F: Federal Facilities in the State of Washington,

except those located on Indian country lands.

13.10.7.1 Discharges authorized by this permit shall not cause or contribute to a violation of any applicable water quality standard of the State of Washington. These standards are found at Chapter 173-201A WAC (Water Quality Standards for Surface Waters), Chapter 173-204 WAC (Sediment Management Standards) and the National Toxics Rule for human health standards (57 FR 60848-60923).

13.10.7.2 Any operator of a facility in Sectors A, D, E, F, G, H, J, L, M, N, or U who intends to obtain authorization under the MSGP-2000 for all new and existing storm water discharges must conduct and report benchmark monitoring for turbidity with a cutoff concentration of 50 NTU.

Addendum A—Endangered Species Guidance

I. Assessing Permit Eligibility Regarding Endangered Species

A. Background

To meet its obligations under the Clean Water Act and the Endangered Species Act (ESA) and to promote those Acts' goals, the Environmental Protection Agency (EPA) is seeking to ensure the activities regulated by this Multi-Sector General Permit (MSGP) pose no jeopardy to endangered and threatened species and critical habitat. To ensure that those goals are met, applicants for MSGP coverage are required under Part 1.2.3.6 to assess the impacts of their storm water discharges, allowable non-storm water discharges, and discharge-related activities on Federally listed endangered and threatened species ("listed species") and designated critical habitat ("critical habitat") by following the process listed below. EPA strongly recommends that you follow these steps at the earliest possible stage to ensure that measures to protect listed species and critical habitat are incorporated early in your planning process.

You also have an independent ESA obligation to ensure that your activities do not result in any prohibited "takes" of listed species.¹ Many of the measures required in the MSGP and in these instructions to protect species may also assist you in ensuring that your activities do not result in a prohibited take of species in violation of section 9 of the ESA. If you have or plan activities in areas that harbor endangered and threatened species, you may wish to ensure that you are protected from potential takings liability under ESA section 9 by obtaining an ESA

¹ Section 9 of the ESA prohibits any person from "taking" a listed species (e.g., harassing or harming it) unless: (1) the taking is authorized through a "incidental take statement" as part of undergoing ESA section 7 formal consultation; (2) where an incidental take permit is obtained under ESA section 10 (which requires the development of a habitat conservation plan); or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals; businesses, and governments.

section 10 permit or, if there is a separate federal action regarding the facility, by requesting formal consultation under ESA section 7 regarding that action. If you are not sure whether to pursue a section 10 permit or a section 7 consultation for takings protection, you should confer with the appropriate Fish and Wildlife Service (FWS) and/or National Marine Fisheries Service (NMFS) (collectively the "Services") office.

B. How Does The Basic Eligibility Assessment Process Work?

In order to determine if you are eligible to use the permit, you need to go through a series of steps to determine:

1. Are there any listed endangered or threatened species or critical habitat in proximity to your facility or the point where your discharges reach a receiving water?
2. If there are listed species in proximity, are your discharges or discharge-related activities going to adversely affect them?
3. If adverse effects on listed species or critical habitat are likely, what can you do to eliminate or reduce these effects?
4. Have any adverse effects already been addressed under the Endangered Species Act?
5. Which, if any, of the eligibility criteria make you eligible for permit coverage?

C. What Are the Eligibility Criteria?

The Part 1.2.3.6 eligibility requirement may be satisfied by documenting that one or more of the following criteria has been met:

Criteria A. No Listed Species or Critical Habitat Are in Proximity to Your Facility or the Point Where Authorized Discharges Reach a Water of the United States (See Part 1.2.3.6.3.1)

Using the latest County Species List available from EPA and any other relevant information sources, you have determined that no listed species or critical habitat are in proximity to your facility. Listed species and critical habitat are in proximity to a facility when they are:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from industrial activities to the point of discharge into the receiving water. This may also include areas where storm water from your facility enters groundwater that has a direct hydrological connection to a receiving water (e.g., groundwater infiltrates at your facility and re-emerges to enter a surface waterbody within a short period of time.)

- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters.

- Located in the area of a facility where storm water BMPs are planned or are to be constructed.

Please be aware that no protection from incidental takings liability is provided under this criteria.

Criteria B. An ESA Section 7 Consultation Has Been Performed for a Separate Federal Action Regarding Your Facility (See Part 1.2.3.6.3.2)

A formal or informal ESA § 7 consultation on a separate federal action (e.g., New Source review under NEPA, application for a dredge

and fill permit under CWA § 404, application for an individual NPDES permit, etc.) addressed the effects of your discharges and discharge-related activities on listed species and critical habitat. If your facility was the subject of a formal consultation, it must have resulted in either a "no jeopardy opinion" or a "jeopardy opinion" and you agree to implement any reasonable and prudent alternatives or other conditions upon which the consultation was based. If your facility was the subject of an informal consultation, it must have resulted in a written concurrence by the Service(s) on a finding that the applicant's activities are not likely to adversely affect listed species or critical habitat (for informal consultation, see 50 CFR 402.13).

Criteria C. An Incidental Taking Permit Under Section 10 of the ESA was Issued for Your Facility (See Part 1.2.3.6.3.3)

You have a permit under section 10 of the ESA and that authorization addresses the effects of your wastewater and storm water discharges and discharge-related activities on listed species and critical habitat. Note: You must follow FWS/NMFS procedures when applying for an ESA section 10 permit (see 50 CFR 17.22(b)(1)).

Criteria D. You Have Determined Adverse Effects Are Not Likely (See Part 1.2.3.6.3.4)

Using best judgment, you have investigated potential effects your discharges and discharges-related activities may have on listed species and critical habitat and have no reason to believe there would be adverse effects. Any terms and/or conditions to protect listed species and critical habitat you relied on in order to determine adverse effects would be unlikely must be incorporated into your Storm Water Pollution Prevention Plan (required by the permit) and implemented in order to maintain permit eligibility.

Please be aware that no protection from incidental takings liability is provided under this criteria.

Criteria E. Your Facility Was Covered Under the Eligibility Certification of Another Operator for the Facility Area (See Part 1.2.3.6.3.5)

Your storm water discharges, allowable non-storm water discharges, and discharge-related activities were already addressed in another operator's certification of eligibility under Part 1.2.3.6.3 which covered your facility. By certifying eligibility under Part 1.2.3.6.3.4, you agree to comply with any measures or controls upon which the other operator's certification under Part 1.2.3.6.3 was based.

Please be aware that in order to meet the permit eligibility requirements by relying on another operator's certification of eligibility, the other operator's certification must apply to the location of your facility and must address the effects from your storm water discharges, allowable non-storm water discharges, and discharge-related activities on listed species and critical habitat. This situation will typically occur where an ownership of a facility covered by this permit changes or when there are multiple operators within an industrial park or an airport.

However, before you rely on another operator's certification, you should carefully review that certification along with any supporting information. You also need to confirm that no additional species have been listed or critical habitat designated in the area of your facility since the other operator's endangered species assessment was done. If you do not believe that the other operator's certification provides adequate coverage for your facility, you should provide your own independent endangered species assessment and certification.

Please be aware that no protection from incidental takings liability is provided under this criteria.

D. What Procedures Do I Use To Determine if the Eligibility Criteria Can Be Satisfied?

Caution: Additional endangered and threatened species have been listed and critical habit designated since the 1995 MSGP was issued and will continue to be added after the effective date of this permit. You must verify any earlier determination of eligibility is still valid before relying on that assessment to certify eligibility for this permit. Where applicable, you may incorporate information from your previous endangered species analysis in your documentation of eligibility for this permit.

To determine eligibility, you must assess (or have previously assessed) the potential effects of your storm water discharges, allowable non-storm water discharges and discharge-related activities on listed species and critical habitat. PRIOR to completing and submitting a Notice of Intent (NOI) form, you must follow the steps outlined below and document the results of your eligibility determination.

Step One: Are There Any Endangered Species or Critical Habitat in Your County (or Other Area) and, if so, Are They in Proximity to Your Facility or Discharge Locations?

1-A. Check for Listed Species Look in the latest county species list to see if any listed species are found where your facility and discharge point(s) are located. If you are located close to the border of a county or your facility is located in one county and your discharge points are located in another, you must look under both counties. Since species are listed and de-listed periodically, you will need the most current list at the time you are doing your endangered species assessment. EPA's most current county-species list is on the Internet at <http://www.epa.gov/owm/esalst2.htm>.

=>Proceed to 1-B.

1-B. Check for Critical Habitat Some (but not all) listed species have designated critical habitat. Exact locations of such habitat is provided in the endangered species regulations at 50 CFR part 17 and part 226. To determine if facility or discharge locations are within designated critical habitat, you should either:

- Review those regulations (which can be found in many larger libraries); or
- Contact the nearest Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) Office. A list of FWS and

NMFS offices is found at section II of this Addendum.; or

- Contact the State Natural Heritage centers. These centers compile and disseminate information on Federally listed and other protected species. They frequently have the most current information on listed species and critical habitat. A list of these centers is provided in section III of the Addendum.

=>Proceed to 1-C.

1-C. Check for Proximity If there are listed species in your county, are they in proximity to your facility or discharge locations? You will need to use the proximity criteria in Eligibility Criteria A to determine if the listed species are in your part of the county. The area in proximity to be searched/surveyed for listed species will vary with the size of the facility, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of facilities potentially covered by the MSGP, no specific method to determine whether species are in proximity is required for permit coverage under the MSGP. Instead, you should use the method or methods which best allow you to determine to the best of your knowledge whether species are in proximity to your particular facility. These methods may include:

- Conducting visual inspections. This method may be particularly suitable for facilities that are smaller in size, facilities located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no nature habitat; and facilities that discharge directly into municipal storm water collection systems. For other facilities, a visual survey of the facility site and storm water drainage areas may be insufficient to determine whether species are likely to be located in proximity to the discharge.

- Contacting the nearest State Wildlife Agency or U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to state or federal wildlife agencies. FWS has offices in every state. NMFS has regional offices in: Gloucester, Massachusetts; St. Petersburg, Florida; Long Beach, California; Portland, Oregon; and Juneau, Alaska.

- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.

- Conducting a formal biological survey. Larger facilities with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.

If neither your facility nor discharge locations are located in designated critical habitat, then you need not consider impacts to critical habitat when following Steps Two through Five below. If your facility or discharge locations are located within critical habitat, then you must look at impacts to critical habitat when following Steps Two through Five. EPA notes that many measures imposed to protect listed species under these

steps will also protect critical habitat. However, obligations to protect habitat under this permit are separate from those to protect listed species. Thus, meeting the eligibility requirements of this permit may require measures to protect critical habitat that are separate from those to protect listed species.
=> Proceed to 1-D

1-D. *Check for Criteria "A" Eligibility* IF NO SPECIES WERE LISTED FOR YOUR COUNTY OR THE SPECIES THAT WERE LISTED WERE NOT IN PROXIMITY TO YOUR DISCHARGE AND YOUR FACILITY AND DISCHARGE LOCATIONS WERE NOT IN PROXIMITY TO CRITICAL HABITAT, YOU ARE ELIGIBLE UNDER CRITERIA "A". Document your endangered species assessment and certify eligibility under Part 1.2.3.6.3.1 of the permit. Congratulations, go to Step Five!

=> If there were listed species or critical habitat, proceed to Step Two

Step Two: Can You Meet Eligibility Criteria "B", "C", or "E"?

2-A *Check for Criteria "B", "C", or "E"* Basis Do one of the following apply:

- There was a completed consultation under ESA § 7 for your facility (Criteria B) => proceed to 2-B
- There is a previously issued ESA § 10 permit for your facility (Criteria C) => proceed to 2-C
- Another operator previously certified eligibility for the area where your facility is located (Criteria E) => proceed to 2-D

=> If no, proceed to Step Three

2-B *Check for Criteria "B" Eligibility* Did the previously completed ESA § 7 consultation consider all currently listed species and critical habitat and address your storm water, allowable non-storm water, and discharge related activities?

=> If no, proceed to Step Three

2-B-1 Did the ESA § 7 consultation result in either a "no jeopardy" opinion by the Service (for formal consultations) or a concurrence by the service that your activities would be "unlikely to adversely affect" listed species or critical habitat?

=> If no, proceed to Step Three

2-B-2 IF YOU AGREE TO IMPLEMENT ANY MEASURES UPON WHICH THE CONSULTATION WAS CONDITIONED, YOU ARE ELIGIBLE UNDER CRITERIA "B". Incorporate any necessary measures into your Storm Water Pollution Prevention Plan, document your endangered species assessment, and certify eligibility under Part 1.2.3.6.3.2. Congratulations, go to Step Five!

=> If you do not agree to implement conditions upon which the consultation was based, proceed to Step Three

2-C *Check for Criteria "C" Eligibility* IF YOUR ESA § 10 PERMIT CONSIDERED ALL CURRENTLY LISTED SPECIES AND CRITICAL HABITAT AND ADDRESSES YOUR STORM WATER, ALLOWABLE NON-STORM WATER, AND DISCHARGE RELATED ACTIVITIES, YOU ARE ELIGIBLE UNDER CRITERIA "C". Incorporate any necessary measures into your Storm Water Pollution Prevention Plan, document your

endangered species assessment, and certify eligibility under Part 1.2.3.6.3.3 of the permit. Congratulations, go to Step Five!

=> If your ESA § 10 permit did not meet these criteria, proceed to Step Three

2-D *Check for Criteria "E" Eligibility* Did the other operator's certification of eligibility consider all currently listed species and critical habitat and address your storm water, allowable non-storm water, and discharge related activities?

=> If no, proceed to Step Three

2-D-1 IF YOU AGREE TO IMPLEMENT ANY MEASURES UPON WHICH THE OTHER OPERATOR'S CERTIFICATION WAS BASED, YOU ARE ELIGIBLE UNDER CRITERIA "E". Incorporate any necessary measures into your Storm Water Pollution Prevention Plan, document your endangered species assessment, and certify eligibility under Part 1.2.3.6.3.5 of the Permit. Congratulations, go to Step Five!

=> If you do not agree to implement conditions upon which another operator's certification was based, proceed to Step Three

Step Three: Are Listed Species or Critical Habitat Likely To Be Adversely Affected by Your Facility's Storm Water Discharges, Allowable Non-storm Water Discharges, or Discharge-related Activities?

If you are unable to certify eligibility under Criteria A, B, C, or E, you must assess whether your storm water discharges, allowable non-storm water discharges, and discharge-related activities are likely to pose jeopardy to listed species or critical habitat. "Storm water discharge-related activities" include:

Activities which cause, contribute to, or result in point source storm water pollutant discharges; and

Measures to control storm water discharges and allowable non-storm water discharges including the siting, construction, operation of best management practices (BMPs) to control, reduce or prevent water pollution.

Effects from storm water discharges, allowable non-storm water discharges, and discharge-related activities which could pose jeopardy include:

Hydrological. Wastewater or storm water discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of wastewater or storm water discharged and the volume and condition of the receiving water. Where a discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.

Habitat. Excavation, site development, grading, and other surface disturbance activities, including the installation or placement of wastewater or storm water ponds or BMPs, may adversely affect listed species or their habitat. Wastewater or storm water associated with facility operation may drain or inundate listed species habitat.

Toxicity. In some cases, pollutants in wastewater or storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each facility. If you are having difficulty in determining whether your facility is likely to pose jeopardy to a listed specie or critical habitat, then the appropriate office of the FWS, NMFS, or Natural Heritage Center listed in Sections II and III of this Addendum should be contacted for assistance.

Document the results of your assessment and make a preliminary determination on whether or not there would likely be any jeopardy to listed species or critical habitat. You will need to determine that your activities are either "unlikely to adversely affect" or "may adversely affect". Your determination may be based on measures that you implement to avoid, eliminate, or minimize adverse affects.

=> Proceed to Step Four

Step Four: Can You Meet Eligibility Criteria "D"?

Using best judgment, can you determine your facility's storm water discharges, allowable non-storm water discharges, and discharge-related activities are unlikely to pose jeopardy to listed species or critical habitat?

4-A IF STEP THREE DETERMINATION IS "UNLIKELY TO ADVERSELY AFFECT", YOU ARE ELIGIBLE UNDER CRITERIA "D". Incorporate appropriate measures upon which your eligibility was based into your Storm Water Pollution Prevention Plan and certify eligibility under Part 1.2.3.6.3.4 of the permit. Congratulations, go to Step Five.

=> If there may be adverse effects, proceed to Step 4-B

4-B *Step Three (or Step 4-A-1) Determination is "May Adversely Affect"* You must contact the Service(s) to discuss your findings and measures you could implement to avoid, eliminate, or minimize adverse affects.

4-B-1 IF YOU AND THE SERVICE(S) REACH AGREEMENT ON MEASURES TO AVOID ADVERSE EFFECTS, YOU ARE ELIGIBLE UNDER CRITERIA "D". Incorporate appropriate measures upon which your eligibility was based into your Storm Water Pollution Prevention Plan and certify eligibility under Part 1.2.3.6.3.4 of the permit. Congratulations, go to Step Five.

4-C *Endangered Species Issues Cannot be Resolved* If you cannot reach agreement with the Service(s) on measures to avoid, eliminate, or reduce adverse effects to an acceptable level; and if any likely adverse effects cannot otherwise be addressed through meeting the other criteria of Part 1.2.3.6; then you are not eligible for coverage under the MSGP at this time and must seek coverage under an individual permit. Proceed to 40 CFR 122.26(c) for individual permit application requirements.

Step Five: Submit Notice of Intent and Document Results of the Eligibility Determination

Once all other Part 1.2 eligibility requirements have been met, you may submit the Notice of Intent (NOI). Signature and submittal of the NOI is also deemed to constitute your certification, under penalty of law, of your eligibility for permit coverage.

You must include documentation of Part 1.2.3.6 eligibility in the pollution prevention plan required for the facility. Documentation required for the various eligibility criteria are as follows:

Criteria A—A copy of the County-Species List pages with the county(ies) where your facility and discharges are located and a statement on how you determined that no listed species or critical habitat was in proximity to your discharge.

Criteria B—A copy of the Service(s)'s Biological Opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA § 7 consultation.

Criteria C—A copy of the Service(s)'s letter transmitting the ESA § 10 authorization.

Criteria D—Documentation on how you determined adverse effects on listed species and critical habitat were unlikely.

Criteria E—A copy of the documents originally used by the other operator of your facility (or area including your facility) to satisfy the documentation requirement of Criteria A, B, C or D.

E. Duty To Implement Terms and Conditions Upon Which Eligibility Was Determined

You must comply with any terms and conditions imposed under the eligibility requirements of Part 1.2.3.6.3 to ensure that your storm water discharges, allowable non-storm water discharges, and discharge-related activities do not pose jeopardy to listed species and/or critical habitat. You must incorporate such terms and conditions in your facility's Storm Water Pollution Prevention Plan as required by the permit. If the eligibility requirements of Part 1.2.3.6 cannot be met, then you may not receive coverage under this permit. You should then consider applying to the permitting authority for an individual permit.

II. U.S. Fish and Wildlife Service Offices

National Website For Endangered Species Information. Endangered Species Home page: <http://www.fws.gov/r9endspp/endspp.html>

Regional, State, Field and Project Offices

USFWS, Region One—Regional Office

Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD Ecological Services, 911 NE 11 Avenue, Portland, OR 97232-4181, (503) 231-6121

State, Field, and Project Offices (Region One)

Field Supervisor, U.S. Fish and Wildlife Service, P.O. Box 50088, 300 Ala Moana Blvd., Rm 3108, Honolulu, HI 96850

Field Supervisor, U.S. Fish and Wildlife Service, Upper Columbia R. Basin F&W Office, 11103 East Montgomery Drive, Ste 2, Spokane, WA 99306

State Supervisor, U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, 2600 S.E. 98th Avenue Suite 100, Portland, OR 97266

Field Supervisor, U.S. Fish and Wildlife Service, Snake River Basin F&W Office, 1387 South Vinnell Way, Room 368, Boise, Idaho 83709

State Supervisor, U.S. Fish and Wildlife Service, Nevada State Office, 4600 Kietzke Lane, Building C, Rm. 125, Reno, NV 89502-5093

State Supervisor, U.S. Fish and Wildlife Service, Western Washington F&W Office, 510 Desmond Dr., Suite 102, Lacey, WA 98503-1273

Field Supervisor, U.S. Fish and Wildlife Service, Klamath Falls F&W Office, 6600 Washburn Way, Klamath Falls, OR 97603

Field Supervisor, U.S. Fish and Wildlife Service, Klamath River F&W Office, 1215 South Main, Suite 212, Yreka, CA 96097-1006

Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West, Carlsbad, CA 92008

Field Supervisor, U.S. Fish and Wildlife Service, Ventura Field Office, 2493 Portola Road, Suite B, Ventura, CA 93003

Project Leader, U.S. Fish and Wildlife Service, Coastal California Fish and Wildlife Office, 1125 16th St., Rm. 209, Arcata, CA 95521-5582

Project Leader, U.S. Fish and Wildlife Service, Northern Central Valley F&W Office, 10959 Tyler Road, Red Bluff, CA 96080

State Supervisor, U.S. Fish and Wildlife Service, California State Office, 3310 El Camino Avenue, Suite 120, Sacramento, CA 95821-6340

Field Supervisor, U.S. Fish and Wildlife Service, Sacramento Fish & Wildlife Office, 3310 El Camino Avenue, Suite 120, Sacramento, CA 95821-6340

USFWS Region Two—Regional Office

Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD Ecological Services, P.O. Box 1306, Albuquerque, NM 87103

State, Field, and Project Offices (Region Two)

Field Supervisor, U.S. Fish and Wildlife Service, Corpus Christi Field Office, 6300 Ocean Dr., Campus Box 338, Corpus Christi, TX 78412

Field Supervisor, U.S. Fish and Wildlife Service, Arlington Field Office, 711 Stadium Dr., East, Suite 252, Arlington, TX 76011

Field Supervisor, U.S. Fish and Wildlife Service, Clear Lake Field Office, 17629 El Camino Real, Suite 211, Houston, TX 77058

Field Supervisor, U.S. Fish and Wildlife Service, Oklahoma Field Office, 222 S. Houston, Suite a, Tulsa, OK 74127

Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Field Office, 2105 Osuna, NE, Albuquerque, NM 87113

Field Supervisor, U.S. Fish and Wildlife Service, Austin Ecological Serv. Field Office, 10711 Burnet Road, Suite 200, Austin, TX 78758

Field Supervisor, U.S. Fish and Wildlife Service, Arizona State Office, 2321 W. Royal Palm Road, Suite 103, Phoenix, AZ 85021-4951

USFWS Region Three—Regional Office

Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD Ecological Services, BHW Federal Bldg, 1 Federal Drive, Fort Snelling, MN 55111-4056

State, Field, and Project Offices (Region Three)

Field Supervisor, U.S. Fish and Wildlife Service, Chicago, Illinois Field Office, 1000 Hart Rd., Suite 180, Barrington, IL 60010

Field Supervisor, U.S. Fish and Wildlife Service, East Lansing Field Office, 2651 Coolidge Road, East Lansing, MI 48823

Field Supervisor, U.S. Fish and Wildlife Service, Reynoldsburg Field Office, 6950 Americana Parkway, Suite H, Reynoldsburg, OH 43068-4132

Field Supervisor, U.S. Fish and Wildlife Service, Bloomington Field Office, 620 South Walker Street, Bloomington, IN 47403-2121

Field Supervisor, U.S. Fish and Wildlife Service, Twin Cities E.S. Field Office, 4101 East 80th Street, Bloomington, MN 55425-1665

Field Supervisor, U.S. Fish and Wildlife Service, Columbia Field Office, 608 East Cherry Street, Room 200, Columbia, MO 65201-7712

Field Supervisor, U.S. Fish and Wildlife Service, Green Bay Field Office, 1015 Challenger Court, Green Bay, WI 54311-8331

Field Supervisor, U.S. Fish and Wildlife Service, Rock Island Field Office, 4469 48th Avenue Court, Rock Island, IL 61201

Field Supervisor, U.S. Fish and Wildlife Service, Marion Suboffice, Route 3, Box 328, Marion, IL 62959-4565

USFWS Region Four—Regional Office

Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD—Ecological Services, 1875 Century Blvd., Suite 200, Atlanta, GA 30345

State, Field, and Project Offices (Region Four)

Field Supervisor, U.S. Fish and Wildlife Service, Panama City Field Office, 1612 June Avenue, Panama City, FL 32405-3721

Field Supervisor, U.S. Fish and Wildlife Service, South Florida Ecosystem Field Office, 1360 U.S. Hwy 1, #5; P.O. Box 2676, Vero Beach, FL 32961-2676

Field Supervisor, U.S. Fish and Wildlife Service, Caribbean Field Office, P.O. Box 491, Boqueron, PR 00622

Field Supervisor, U.S. Fish and Wildlife Service, Puerto Rican Parrot Field Office, P.O. Box 1600, Rio Grande, PR 00745

Field Supervisor, U.S. Fish and Wildlife Service, Brunswick Field Office, 4270 Norwich Street, Brunswick, GA 31520-2523

Field Supervisor, U.S. Fish and Wildlife Service, Jacksonville Field Office, 6620 Southpoint Drive S., Suite 310, Jacksonville, FL 32216-0912

Field Supervisor, U.S. Fish and Wildlife Service, Charleston Field Office, 217 Ft. Johnson Road, P.O. Box 12559, Charleston, SC 29422-2559

Field Supervisor, U.S. Fish and Wildlife Service, Clemson F.O., Dept. of Forest Resources, 261 Lehotsky Hall, Box 341003, Clemson, SC 29634-1003

Field Supervisor, U.S. Fish and Wildlife Service, Raleigh Field Office, P.O. Box 33726, Raleigh, NC 27636-3726

Field Supervisor, U.S. Fish and Wildlife Service, Cookeville Field Office, 446 Neal Street, Cookeville, TN 38501

- Field Supervisor, U.S. Fish and Wildlife Service, Asheville Field Office, 160 Zillicoa Street, Asheville, NC 28801
- Field Supervisor, U.S. Fish and Wildlife Service, Daphne Field Office, P.O. Drawer 1190, Daphne, AL 36526
- Field Supervisor, U.S. Fish and Wildlife Service, Vicksburg Field Office, 2524 S. Frontage Road, Suite B, Vicksburg, MS 39180-5269
- Field Supervisor, U.S. Fish and Wildlife Svc., Lafayette Field Office, Brandywine II, Suite 102, 825 Kaliste Saloom Road, Lafayette, LA 70508
- Field Supervisor, U.S. Fish and Wildlife Service, Jackson Field Office, 6578 Dogwood View Pkwy Suite A, Jackson, MS 39213
- Region Five—Regional Office**
- Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD Ecological Services, 300 Westgate Center Drive, Hadley, MA 01035-9589
- State, Field and Project Offices (Region Five)
- Project Leader, U.S. Fish and Wildlife Service, Delaware Bay Estuary Project, 2610 Whitehall Neck Road, Smyrna, DE 19977
- Project Leader, U.S. Fish and Wildlife Service, Southern New England/NYBCE Program, Shoreline Plaza, Route 1A, P.O. Box 307, Charlestown, RI 02813
- Project Leader, U.S. Fish and Wildlife Service, Gulf of Maine Project, 4 R Fundy Road, Falmouth, ME 04105
- Project Leader U.S. Fish and Wildlife Service, Chesapeake Bay Field, Office, 177 Admiral Cochrane Drive, Annapolis, Maryland 21401
- Project Leader, U.S. Fish and Wildlife Service, Virginia Field Office, P.O. Box 99, 6669 Short Lane, Gloucester, VA 23061
- Project Leader, U.S. Fish and Wildlife Service, Southwestern Virginia Field Office, P.O. Box 2345, Abingdon, VA 24212
- Project Leader, U.S. Fish and Wildlife Service, New England Field Office, 22 Bridge St., Unit #1, Concord, New Hampshire 03301-4986
- Project Leader, U.S. Fish and Wildlife Service, Maine Field Office, 1033 South Main St., Old Town, Maine 04468
- Project Leader, U.S. Fish and Wildlife Service, Rhode Island Field Office, Shoreline Plaza, Route 1A; P.O. Box 307, Charlestown, Rhode Island 02813
- Project Leader, U.S. Fish and Wildlife Service, Vermont Field Office, 11 Lincoln Street, Winston Prouty Federal Building, Essex Junction, VT 05452
- Project Leader, U.S. Fish and Wildlife Service, New Jersey Field Office, 927 North Main St., Bldg. D1, Pleasantville, New Jersey 08232
- Project Leader, U.S. Fish and Wildlife Service, New York Field Office, 3817 Luker Road, Cortland, New York 13045
- Project Leader, U.S. Fish and Wildlife Service, Long Island Field Office, P.O. Box 608, Islip, New York 11751-0608
- Project Leader, U.S. Fish and Wildlife Service, Pennsylvania Field Office, 315 S. Allen St., Suite 322, State College, Pennsylvania 16801
- Project Leader, U.S. Fish and Wildlife Service, Eastern Pennsylvania Field Office, 11 Hap Arnold Boulevard, Box H, Tobyhanna, Pennsylvania 18466-0080
- Project Leader, U.S. Fish and Wildlife Service, West Virginia Field Office, Route 250, S.—Elkins Shopping Plaza, Elkins, West Virginia 26241
- Region Six—Regional Office**
- Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD-Ecological Services, P.O. Box 25486, DFC, Denver, CO 80225
- State, Field, and Project Offices (Region Six)
- Field Supervisor, U.S. Fish and Wildlife Service, Montana Field Office, 100 N. Park, Suite 320, Helena, MT 59601
- Sub-Office Supervisor, U.S. Fish and Wildlife Service, Billings Sub-Office, 2900 4th Ave. North-Rm 301, Billings, MT 59101
- Sub-Office Supervisor, U.S. Fish and Wildlife Service, Kalispell Sub-Office, 780 Creston Hatchery Road, Kalispell, MT 59901
- Grizzly Bear Recovery Coordinator, U.S. Fish and Wildlife Service, Forestry Sciences Lab, University of Montana, Missoula, MT 59812
- Field Supervisor, U.S. Fish and Wildlife Service, North Dakota Field Office, 1500 Capitol Avenue, Bismarck, ND 58501
- Field Supervisor, U.S. Fish and Wildlife Service, Nebraska Field Office, 203 W. 2nd Street; Federal Bldg., 2nd Floor, Grand Island, NE 68801
- Field Supervisor, U.S. Fish and Wildlife Service, Kansas Field Office, 315 Houston, Suite E, Manhattan, KS 66502
- Field Supervisor, U.S. Fish and Wildlife Service, South Dakota Field Office, 420 S. Garfield Ave., Suite 400, Pierre, SD 57501-5408
- Field Supervisor, U.S. Fish and Wildlife Service, Salt Lake City Field Office, Lincoln Plaza, 145 East 1300 South—Suite 404, Salt Lake City, UT 84115
- Field Supervisor, U.S. Fish and Wildlife Service, Colorado Field Office, 730 Simms, Suite 290, Golden, CO 80401-4798
- Field Supervisor, U.S. Fish and Wildlife Service, Western Colorado Field Office, 764 Horizon Drive South, Annex A, Grand Junction, CO 81506-3946
- Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, 4000 Morrie Avenue, Cheyenne, WY 82001
- E.S. Coordinator, U.S. Fish and Wildlife Service, Rocky Mountain Arsenal, National Wildlife Area, Building 111, Commerce City, CO 80022-1748
- Colorado River Recovery Coordinator, U.S. Fish and Wildlife Service, P.O. Box 25486, DFC, Denver, CO 80225
- U.S. Fish and Wildlife Service, Laramie Black Footed Ferret Office, 410 Grand Ave., Suite 315, Laramie, WY 80270
- Region Seven—Regional Office**
- Division Chief, Endangered Species, U.S. Fish and Wildlife Service, ARD Ecological Services, 1011 E. Tudor Road, Anchorage, AK 99503
- State, Field, and Project Offices (Region Seven)
- Field Supervisor, U.S. Fish and Wildlife Service, Ecological Services, 605 West 4th Avenue, Room G-62, Anchorage, AK 99501
- Field Supervisor, U.S. Fish and Wildlife Service, Ecological Services, 101 12th Avenue, Box 19 (Room 232), Fairbanks, AK 99701
- Field Supervisor, U.S. Fish and Wildlife Service, Ketchikan Sub-office, 103 Main Street, P.O. Box 3193, Ketchikan, AK 99901
- Field Supervisor, U.S. Fish and Wildlife Service, Ecological Services, 300 Vintage Blvd., Suite 201, Juneau, AK 99801
- Region Eight—Has not yet been created out of the other FWS Regions at the time of this posting.
- Region Nine**
- Janet Ady—Outreach, U.S. Fish and Wildlife Service, National Conservation Training Center, Route 3, Box 49, Kearneysville, WV 25430
- Dan Benfield—Training, U.S. Fish and Wildlife Service, National Conservation Training Center, Route 3, Box 49, Kearneysville, WV 25430

III. National Marine Fisheries Service Offices

The National Marine Fisheries Service is developing a database to provide county and territorial water (up to three miles offshore) information on the presence of endangered and threatened species and critical habitat. The database should be found at the "Office of Protected Resources" site on the NMFS Homepage at <http://www.nmfs.gov>.

Regional and Field Offices—Northeast Region

Protected Resources Program, National Marine Fisheries Service, Northeast Region, One Blackburn Drive, Gloucester, Massachusetts 01930

Milford Field Office, National Marine Fisheries Service, 212 Rogers Avenue, Milford, Connecticut 06460

Oxford Field Office, National Marine Fisheries Service, 904 So. Morris Street, Oxford, Maryland 21654

Sandy Hook Field Office, James J. Howard Marine Sciences Laboratory, National Marine Fisheries Service, 74 Magruder Road, Highlands, New Jersey 07732

Protected Species Branch, National Marine Fisheries Service, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, Massachusetts 02543

Southeast Region

Protective Species Management Branch, National Marine Fisheries Service, Southeast Region, 9721 Executive Center Drive, St. Petersburg, Florida 33702-2432

Northwest Region

Protected Species Division, National Marine Fisheries Service, Northwest Region, 525 NE Oregon, Suite 500, Portland, Oregon 97232-2737

Boise Field Office, National Marine Fisheries Service, 1387 S. Vinnel Way, Suite 377, Boise, Idaho 83709

Olympia Field Office, National Marine Fisheries Service, 510 Desmond Drive, SE, Suite 103, Lacey, Washington 98503

Roseburg Field Office, National Marine Fisheries Service, 2900 Stewart Parkway NW, Roseburg, Oregon 97470
Rufus Field Office, National Marine Fisheries Service, P.O. Box 67, 704 "E" 1st, Rufus, Oregon 97050

Southwest Region

Protected Species Management Division, Southwest Region, National Marine Fisheries Service, 501 West Ocean Blvd., Suite 4200, Long Beach, California 90802-4213

Arcata Field Office, National Marine Fisheries Service, 1125 16th Street, Room 209, Arcata, California 95521

Eureka Field Office, National Marine Fisheries Service, 1330 Bayshore Way, Eureka, California 95501

Pacific Islands Area Field Office, National Marine Fisheries Service, 2570 Dole Street, Room 106, Honolulu, Hawaii 96822-2396

Santa Rosa Field Office, Protected Resources Program, National Marine Fisheries Service, 777 Sonoma Avenue, Room 325, Santa Rosa, California 95404

Alaska Region

Protected Resources Management, Division, Alaska Region, National Marine Fisheries Service, 709 West 9th Street, Federal Building 461, P.O. Box 21767, Juneau, Alaska 99802

Anchorage Office, 222 West 7th Avenue, Box 10, Anchorage, Alaska 99513-7577

IV. Natural Heritage Centers

The Natural Heritage Network comprises 85 biodiversity data centers throughout the Western Hemisphere. These centers collect, organize, and share data relating to endangered and threatened species and habitat. The network was developed to inform land-use decisions for developers, corporations, conservationists, and government agencies and is also consulted for research and educational purposes. The centers maintain a Natural Heritage Network Control Server Website (<http://www.heritage.tnc.org>) which provides website and other access to a large number of specific biodiversity centers. Some of these centers are listed below:

Alabama Natural Heritage Program, Huntingdon College, Massey Hall, 1500 East Fairview Avenue, Montgomery, AL 36106-2148, (334) 834-4519 Fax: (334) 834-5439, Internet: alnhp@wsnet.com

Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, AK 99501, 907/257-2702 Fax: 907/258-9139, Program Director: David Duffy, 257-2707, Internet: afdcd1@orion.alaska.edu

Arizona Heritage Data Management System, Arizona Game & Fish Department, WM-H, 2221 W. Greenway Road, Phoenix, AZ 85023, 602/789-3612 Fax: 602/789-3928, Internet: hdms@gf.state.az.us Internet: hdms1@gf.state.az.us

Arkansas Natural Heritage Commission, Suite 1500, Tower Building, 323 Center Street, Little Rock, AR 72201, 501/324-9150 Fax: 501/324-9618, Director: Harold K. Grimmitt, -9614

California Natural Heritage Division, Department of Fish & Game, 1220 S Street,

Sacramento, CA 95814, 916/322-2493 Fax: 916/324-0475

Colorado Natural Heritage Program, Colorado State University, 254 General Services Building, Fort Collins, CO 80523, 970/491-1309 Fax: 970/491-3349

Connecticut Natural Diversity Database, Natural Resources Center, Department of Environmental Protection, 79 Elm Street, Store Level, Hartford, CT 06106-5127, 860/424-3540 Fax: 860/424-4058

Delaware Natural Heritage Program, Division of Fish & Wildlife, Department of Natural Resources & Environmental Control, 4876 Hay Point Landing Road Smyrna, DE 19977, 302/653-2880 Fax: 302/653-3431

District of Columbia Natural Heritage Program, 13025 Riley's Lock Road, Poolesville, MD 20837, 301/427-1302 Fax: 301/427-1355

Florida Natural Areas Inventory, 1018 Thomasville Road, Suite 200-C, Tallahassee, FL 32303, 904/224-8207 Fax: 904/681-9364

Florida Natural Areas Inventory, Eglin Air Force Base, P.O. Box 1150, Niceville, FL 32588, 904/883-6451 Fax: 904/682-8381

Georgia Natural Heritage Program, Wildlife Resources Division, Georgia Department of Natural Resources, 2117 U.S. Highway 278 S.E., Social Circle, GA 30279, 706/557-3032 or 770/918-6411, Fax: 706/557-3033 or 706/557-3040 Internet: natural_heritage@mail.dnr.state.ga.us

Hawaii Natural Heritage Program, The Nature Conservancy of Hawaii, 1116 Smith Street, Suite 201, Honolulu, HI 96817, 808/537-4508 Fax: 808/545-2019

Idaho Conservation Data Center, Department of Fish & Game, 600 South Walnut Street, Box 25, Boise, ID 83707-0025, 208/334-3402 Fax: 208/334-2114

Illinois Natural Heritage Division, Department of Natural Resources, Division of Natural Heritage, 524 South Second Street, Springfield, IL 62701-1787, 217/785-8774 Fax: 217/785-8277

Illinois Nature Preserves Commission, Director: Carolyn Grosboll, Deputy Dir/Steward: Randy Heidorn, Deputy Dir/Protect: Don McFall, Office Specialist: Karen Tish, 217/785-8774 Fax: 217/785-8277

Indiana Natural Heritage Data Center, Division of Nature Preserves, Department of Natural Resources, 402 West Washington Street, Room W267, Indianapolis, IN 46204, 317/232-4052 Fax: 317/233-0133

Iowa Natural Areas Inventory, Department of Natural Resources, Wallace State Office Building, Des Moines, IA 50319-0034, Fax: 515/281-6794, Coordinator/Zoologist: Daryl Howell, 515/281-8524

Kansas Natural Heritage Inventory, Kansas Biological Survey, 2041 Constant Avenue, Lawrence, KS 66047-2906, 913/864-3453 Fax: 913/864-5093

Kentucky Natural Heritage Program, Kentucky State Nature Preserves Commission, 801 Schenkel Lane, Frankfort, KY 40601, 502/573-2886 Fax: 502/573-2355

Louisiana Natural Heritage Program, Department of Wildlife & Fisheries, P.O. Box 98000, Baton Rouge, LA 70898-9000, 504/765-2821 Fax: 504/765-2607

Maine Natural Areas Program, Department of Conservation (FedEx/UPS: 159 Hospital Street), 93 State House Station, Augusta, ME 04333-0093, 207/287-8044 Fax: 207/287-8040, Internet: mnap@state.me.us Web site: <http://www.state.me.us/doc/mnap/home.htm>

Maryland Heritage & Biodiversity Conservation Programs, Department of Natural Resources, Tawes State Office Building, E-1, Annapolis, MD 21401, 410/260-8540 Fax: 410/260-8595, Web site: <http://www.heritage.tnc.org/nhp/us/md/> Massachusetts Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife, Route 135, Westborough, MA 01581 508/792-7270 ext. 200 Fax: 508/792-7275

Michigan Natural Features Inventory, Mason Building, 5th floor (FedEx/UPS: 530 W Allegan, 48933), Box 30444, Lansing, MI 48909-7944, 517/373-1552 Fax: 517/373-6705, Director: Leni Wilsman, 573-7565, Internet: wilsman@wildlife.dnr.state.mi.us

Minnesota Natural Heritage & Nongame Research, Department of Natural Resources, 500 Lafayette Road, Box 7, St. Paul, MN 55155, 612/297-4964 Fax: 612/297-4961

Mississippi Natural Heritage Program, Museum of Natural Science, 111 North Jefferson Street, Jackson, MS 39201-2897, 601/354-7303 Fax: 601/354-7227

Missouri Natural Heritage Database, Missouri Department of Conservation, P.O. Box 180 (FedEx: 2901 West Truman Blvd), Jefferson City, MO 65102-0180, 573/751-4115 Fax: 573/526-5582

Montana Natural Heritage Program, State Library Building, 1515 E. 6th Avenue, Helena, MT 59620, 406/444-3009 Fax: 406/444-0581, Internet:

mtnhp@nris.msl.mt.gov, Homepage/World Wide Web: <http://nris.msl.mt.gov/mtnhp/nhp-dir.html>

Navajo Natural Heritage Program, P.O. Box 1480, Window Rock, Navajo Nation, AZ 86515, (520) 871-7603, (520) 871-7069 (FAX)

Nebraska Natural Heritage Program, Game and Parks Commission, 2200 North 33rd Street, P.O. Box 30370, Lincoln, NE 68503, 402/471-5421 Fax: 402/471-5528

Nevada Natural Heritage Program, Department of Conservation & Natural Resources, 1550 E. College Parkway, Suite 145, Carson City, NV 89706-7921, 702/687-4245 Fax: 702/885-0868

New Hampshire Natural Heritage Inventory, Department of Resources & Economic Development, 172 Pembroke Street, P.O. Box 1856, Concord, NH 03302, 603/271-3623 Fax: 603/271-2629

New York Natural Heritage Program, Department of Environmental Conservation, 700 Troy-Schenectady Road, Latham, NY 12110-2400, 518/783-3932 Fax: 518/783-3916, Computer: 518/783-3946

North Carolina Heritage Program, NC Department of Environment, Health & Natural Resources, Division of Parks & Recreation, P.O. Box 27687, Raleigh, NC 27611-7687, 919-733-4181 Fax: 919/715-3085

North Dakota Natural Heritage Inventory, North Dakota Parks & Recreation

Department, 1835 Bismarck Expressway, Bismarck, ND 58504, 701/328-5357 Fax: 701/328-5363

Ohio Natural Heritage Data Base, Division of Natural Areas & Preserves, Department of Natural Resources, 1889 Fountain Square, Building F-1, Columbus, OH 43224, 614/265-6453 Fax: 614/267-3096

Oklahoma Natural Heritage Inventory, Oklahoma Biological Survey, 111 East Chesapeake Street, University of Oklahoma, Norman, OK 73019-0575, 405/325-1985 Fax: 405/325-7702, Web site: <http://obssun02.uoknor.edu/biosurvey/onhi/home.html>

Oregon Natural Heritage Program, Oregon Field Office, 821 SE 14th Avenue, Portland, OR 97214 503/731-3070; 230-1221 Fax: 503/230-9639

Pennsylvania Natural Diversity Inventory (East, West, Central)

- * Pennsylvania Natural Diversity Inventory—East, The Nature Conservancy, 34 Airport Drive, Middletown, PA 17057, 717/948-3962 Fax: 717/948-3957
- * Pennsylvania Natural Diversity Inventory—West, Western Pennsylvania Conservancy, Natural Areas Program, 316 Fourth Avenue, Pittsburgh, PA 15222, 412/288-2777 Fax: 412/281-1792
- * Pennsylvania Natural Diversity Inventory—Central, Bureau of Forestry, P.O. Box 8552, Harrisburg, PA 17105-8552, 717/783-0388 Fax: 717/783-5109

Puerto Rico Natural Heritage Program, Division de Patrimonio Natural, Area de Planificacion Integral, Departamento de Recursos Naturales y Ambientales de Puerto Rico, P.O. Box 5887, Puerta de Tierra, Puerto Rico 00906, Tel: 787-722-1726, Fax: 787-725-9526

Rhode Island Natural Heritage Program, Department of Environmental Management, Division of Planning & Development, 83 Park Street, Providence, RI 02903, 401/277-2776, x4308 Fax: 401/277-2069

South Carolina Heritage Trust, SC Department of Natural Resources, P.O. Box 167, Columbia, SC 29202, 803/734-3893 Fax: 803/734-6310 (Call first)

South Dakota Natural Heritage Data Base, SD Department of Game, Fish & Parks Wildlife Division, 523 E. Capitol Avenue, Pierre, SD 57501-3182, 605/773-4227 Fax: 605/773-6245

Tennessee Division of Natural Heritage, Department of Environment & Conservation, 401 Church Street, Life and Casualty Tower, 8th Floor, Nashville, TN 37243-0447, 615/532-0431 Fax: 615/532-0614

Texas Biological and Conservation Data System, 3000 South IH-35, Suite 100, Austin, TX 78704, 512/912-7011 Fax: 512/912-7058

U.S. Virgin Islands Conservation Data Center, Eastern Caribbean Center, University of the Virgin Islands, No. 2 John Brewers Bay, St. Thomas, VI 00802, (809) 693-1030 [Voice] (809) 693-1025, [Fax], Home Page: cdc.uvi.edu, E-Mail: dbarry@uvi.edu

Utah Natural Heritage Program, Division of Wildlife Resources, 1596 West North Temple, Salt Lake City, UT 84116, 801/538-4761 Fax: 801/538-4709

Vermont Nongame & Natural Heritage Program, Vermont Fish & Wildlife Department, 103 S. Main Street, 10 South, Waterbury, VT 05671-0501, 802/241-3700 Fax: 802/241-3295

Virginia Division of Natural Heritage, Department of Conservation & Recreation, Main Street Station, 1500 E. Main Street, Suite 312, Richmond, VA 23219, 804/786-7951 Fax: 804/371-2674

Washington Natural Heritage Program, Department of Natural Resources, (FedEx: 1111 Washington Street, SE), P.O. Box 47016, Olympia, WA 98504-7016, 360/902-1340 Fax: 360/902-1783

West Virginia Natural Heritage Program, Department of Natural Resources, Operations Center, Ward Road, P.O. Box 67, Elkins, WV 26241, 304/637-0245 Fax: 304/637-0250

Wisconsin Natural Heritage Program, Endangered Resources, Department of Natural Resources, 101 S. Webster Street, Box 7921, Madison, WI 53707, 608/266-7012 Fax: 608/266-2925

Wyoming Natural Diversity Database, 1604 Grand Avenue, Suite 2, Laramie, WY 82070, 307/745-5026 Fax: 307/745-5026 (Call first), Internet: wyndd@lariat.or

Addendum B—Historic Properties Guidance

Applicants must determine whether their facility's storm water discharges, allowable non-storm water discharges, or construction of best management practices (BMPs) to control such discharges, has potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing dischargers who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for facilities which are new industrial storm water dischargers and for existing facilities which are planning to construct BMPs for permit eligibility, applicants should conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, applicants should first determine whether there are any historic properties or places listed on the National Register or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to State and Tribal Historic Preservation Officers nationwide to respond to inquiries concerning the location of historic properties, EPA suggests that applicants first access the "National Register of Historic Places" information listed on the National Park Service's web page (see Part I of this addendum). Addresses for State Historic Preservation Officers and Tribal Historic Preservation Officers are listed in Parts II and III of this addendum, respectively. In instances where a Tribe does not have a Tribal Historic Preservation Officer, applicants should contact the appropriate Tribal government office when responding to

this permit eligibility condition. Applicants may also contact city, county or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

The following three scenarios describe how applicants can meet the permit eligibility criteria for protection of historic properties under this permit:

(1) If historic properties are not identified in the path of a facility's storm water and allowable non-storm water discharges or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), then the applicant has met the permit eligibility criteria under Part 1.2.3.7.1.

(2) If historic properties are identified but it is determined that they will not be affected by the discharges or construction of BMPs to control the discharge, the applicant has met the permit eligibility criteria under Part 1.2.3.7.1.

(3) If historic properties are identified in the path of a facility's storm water and allowable non-storm water discharges or where construction activities are planned to install BMPs to control such discharges, and it is determined that there is the potential to adversely affect the property, the applicant can still meet the permit eligibility criteria under Part 1.2.3.7.2 if he/she obtains and complies with a written agreement with the appropriate State or Tribal Historic Preservation Officer which outlines measures the applicant will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the facility's Storm Water Pollution Prevention Plan. The NOI form is being amended to include which option was selected to demonstrate compliance with NHPA provisions. EPA will notify applicants when the new NOI form takes effect.

In situations where an agreement cannot be reached between an applicant and the State or Tribal Historic Preservation Officer, applicants should contact the Advisory Council on Historic Preservation listed in Part IV of this addendum for assistance.

The term "adverse effects" includes but is not limited to damage, deterioration, alteration or destruction of the historic property or place. EPA encourages applicants to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Applicants are reminded that they must comply with applicable State, Tribal and local laws concerning the protection of historic properties and places.

I. Internet Information on the National Register of Historic Places

An electronic listing of the "National Register of Historic Places," as maintained by the National Park Service on its National Register Information System (NRIS), can be accessed on the Internet at "<http://www.nr.nps.gov/nrshome.htm>". Remember to use small case letters when accessing Internet addresses.

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Associate Director, Cultural Resources, Kate Stevenson, 202-208-7625
Assistant Director & Manager, Cultural Resources, 202-343-9596
Archeology and Ethnography, Frank McManamon, Program Manager, 202-343-4101
HABS/HAER Division, E. Blaine Cliver, Chief, 202-343-9618
Heritage Preservation Services Program, Pat Tiller, Chief, 202-343-9569
Preservation Initiatives Branch, Bryan Mitchell, Chief, 202-343-9558
Technical Preservation Services Branch, Sharon Park, Chief, 202-343-9584,
State, Tribal & Local Programs Branch, Joe Wallis, Chief, 202-343-9564
Museum Management Program, Ann Hitchcock, Chief Curator, 202-343-9569
National Register, History & Education, Dwight Picaithley, Chief Historian, 202-343-9536
Keeper of the National Register of Historic Places, Carol Shull, 202-343-9536
Park Hist Struct/Cult Landscape Prg, Randall Biallas, Chief Historical Architect, 202-343-9588

National Park Service—Systems Support Offices

Anchorage, 907-257-2690, Philadelphia, 215-597-0652, Denver, 303-969-2875, Atlanta, 404-562-3157, San Francisco, 415-427-1300

Advisory Council on Historic Preservation—<http://www.achp.gov>

John Fowler, Executive Director, 202-606-8503, Ron Anzalone, Assistant to Executive Director, 202-606-8505, Don Klima, Director, Office of Planning & Review, Eastern and Western Regions, 202-606-8505

National Trust—<http://www.nthp.org>

Main Number—Washington, DC, 202-588-6000

Northeast Regional Office, Wendy Nicholas, Dir, 617-523-0885

Northeast Field Office, Patrick Hauck, Sr Prog Assoc, 215-991-5778

Southern Field Office, Lisa Burcham, Sr Prog Assoc, 202-588-6107

Southern Regional Office, John Hildreth, Dir, 843-722-8552

Midwest Regional Office, Jim Mann, Dir, 312-939-5547

Southwest Field Office, Jane Jenkins, Dir, 817-332-4398

Mountains/Plains Regional Office, Barbara Pahl, Dir, 303-623-1504

Western Regional Office, Elizabeth Goldstein, Dir, 415-956-0610

Preservation Action—www.preservationaction.org

Susan West Montgomery, President, 202-659-0915

Council on America's Military Past—camphart1@aol.com

Herbert M. Hart, Executive Director, 703-912-6124, Updated September 5, 2000

III. Tribal Historic Preservation Officers (THPO)

In instances where a Tribe does not have a Tribal Historic Preservation Officer, please contact the appropriate Tribal government office when responding to this permit eligibility condition.

Tribal Historic Preservation Officers:

(THPO vacant), Tunica-Biloxi Indians of Louisiana, P.O. Box 331, Marksville, LA 71351

James Bird, Eastern Band of Cherokee Indians, Quallah Boundary, P.O. Box 455, Cherokee, NC 28719

Brenda Boyd, Mille Lacs Band of Ojibwe Indians, HCR 67, Box 194, Onamia, MN 56395

John Brown, Narragansett Indian Tribe, P.O. Box 700, Wyoming, RI 02898

Marcia Cross, Confederated Salish and Kootenai Tribes, P.O. Box 278, Pablo, MT 59855

William Day, Poarch Band of Creek Indians, 5811 Jack Springs Rd., Atmore, AL 36502

Alan S. Downer, Ph.D., Historic Preservation Dept., Navajo Nation, P.O. Box 4950, Window Rock, AZ 86515

Kade M. Ferris, Turtle Mountain Band of Chippewa Indians, P.O. Box 900, Belcourt, ND 58316

Adeline Frédin, Confederated Tribes of the Colville Reservation, P.O. Box 150, Nespelem, WA 99155

Thomas Gates, Cultural Division, Yurok Tribe, 1034 6th St., Eureka, CA 95501

David Grignon, Menominee Indian Tribe of Wisconsin, P.O. Box 910, Keshena, WI 54135-0910

Monza V. Honga, Office of Cultural Resources, Hualapai Tribe, P.O. Box 310, Peach Springs, AZ 86434

Kelly Jackson, Lac du Flambeau, P.O. Box 67, Lac du Flambeau, WI 54538

Manfred (Fred) Jaenig, Confederated Tribes of the Umatilla Reservation, P.O. Box 638, Pendleton, OR 97801

Sebastian (Bronco) LeBeau, Cheyenne River Sioux Tribe, P.O. Box 590, Eagle Butte, SD 57625

Tim Mentz, Standing Rock Sioux Tribe, P.O. Box D, Fort Yates, ND 58538

Donna Stern-McFadden, Mescalero Apache Tribe, P.O. Box 227, Mescalero, New Mexico 88340

Scott E. Stuemke, Confederated Tribes of Warm Springs, Cultural Resources Department, P.O. Box C, Warm Springs, OR 97761

Matthew Vanderhoop, Wampanoag Tribe of Gay Head (Aquinnah), 20 Black Brook Road, Aquinnah, MA 02535-9701, Phone: (508) 645-9265, Fax: (508) 645-3790

John Welch, White Mt. Apache Tribe, P.O. Box 700, Whiteriver, AZ 85941, Phone: (520) 338-5430, Fax: (520) 338-5488

Gerald White, Leech Lake Band of Chippewa Indians, Route 3, Box 100, Cass Lake, MN 56633

Louie J. Wynne, Spokane Tribe of Indians, P.O. Box 100, Wellpinit, WA 99040

For more information: National Association of Tribal Historic Preservation Officers, D. Bambi Kraus, President, 1411 K Street NW, Suite 700, Washington, DC 20005, Phone: (202) 628-8476, Fax: (202) 628-2241

IV. Advisory Council on Historic Preservation

Advisory Council on Historic Preservation, 1100 Pennsylvania Avenue, NW., Suite 809, Washington, DC 20004 Telephone: (202) 606-8503/8505, Fax: (202) 606-8647/8672, E-mail: achp@achp.gov

Addendum C—New Source Environmental Assessments

Basic Format for Environmental Assessment

This is the basic format for the Environmental Assessment prepared by EPA from the review of the applicant's Environmental Information Document (EID) required for new source NPDES permits. Comprehensive information should be provided for those items or issues that are affected; the greater the impact, the more detailed information needed. The EID should contain a brief statement addressing each item listed below, even if the item is not applicable. The statement should at least explain why the item is not applicable.

A. General Information

1. Name of applicant
2. Type of facility
3. Location of facility
4. Product manufactured

B. Description Summaries

1. Describe the proposed facility and construction activity
2. Describe all ancillary construction not directly involved with the production processes
3. Describe briefly the manufacturing processes and procedures
4. Describe the plant site, its history, and the general area

C. Environmental Concerns

1. Historical and Archeological (include a statement from the State Historical Preservation Officer)
2. Wetlands Protection and 100-year Floodplain Management (the Army Corps of Engineers must be contacted if any wetland area or floodplain is affected)
3. Agricultural Lands (a prime farmland statement from the Soil Conservation Service must be included)
4. Coastal Zone Management and Wild and Scenic Rivers
5. Endangered Species Protection and Fish and Wildlife Protection (a statement from the U.S. Fish and Wildlife Service must be included)
6. Air, Water and Land Issues: quality, effects, usage levels, municipal services used, discharges and emissions, runoff and wastewater control, geology and soils involved, land-use compatibility, solid and hazardous waste disposal, natural and man-made hazards involved.
7. Biota concerns: floral, faunal, aquatic resources, inventories and effects
8. Community Infrastructures available and resulting effects: social, economic, health, safety, educational, recreational, housing, transportation and road resources.

BILLING CODE 6560-50-P

Addendum D—Notice of Intent Form

NPDES Form 3510-6		United States Environmental Protection Agency Washington, DC 20460 Notice of Intent for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY Under the Multi-sector NPDES General Permit	Form Approved OMB No. 2040-0086
Submission of this completed Notice of Intent (NOI) constitutes notice that the entity in Section B intends to be authorized to discharge pollutants to waters of the United States, from the facility or site identified in Section C, under EPA's Storm Water Multi-sector General Permit (MSGP). Submission of the NOI also constitutes notice that the party identified in Section B of this form has read, understands, and meets the eligibility conditions of Part I of the MSGP; agrees to comply with all applicable terms and conditions of the MSGP; understands that continued authorization under the MSGP is contingent on maintaining eligibility for coverage, and that implementation of the permittee's pollution prevention plan is required two days after a complete NOI is mailed. In order to be granted coverage, all information required on this form must be completed. Please read and make sure you comply with all permit requirements, including the requirement to prepare and implement a storm water pollution prevention plan.			
A. Permit Selection Permit number assigned to your facility under the previous permit: _____		New Permit Number (EPA Use Only) _____ R05 _____	
B. Facility Operator Information 1. Name: _____ 2. Phone: _____ 3. Mailing Address: a. Street or P.O. Box: _____ b. City: _____ c. State: _____ d. Zip Code: _____			
C. Facility/Site Information 1. Facility/Site Name: _____ 2. Location Address: a. Street: _____ b. City: _____ c. County: _____ d. State: _____ e. Zip Code: _____ 3. a. Latitude: _____° _____' _____" b. Longitude: _____° _____' _____" 4. a. Permit Applicant: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Tribal <input type="checkbox"/> Private <input type="checkbox"/> Other public entity b. Is the facility located on Indian Country Lands? <input type="checkbox"/> Yes <input type="checkbox"/> No 5. Does the facility discharge storm water into: a. Receiving water(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name(s) of receiving water(s): _____ b. A municipal separate storm sewer system (MS4)? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of the MS4 operator: _____ 6. The 4-digit Standard Industrial Classification (SIC) codes or the 2-letter Activity Codes that best represent the principal products produced or services rendered by your facility and major co-located activities: Primary: _____ Secondary (if applicable): _____ 7. Applicable sector(s) of industrial activity, as designated in Part 1.2.1 of the MSGP, that include associated discharges that you seek to have covered under this permit (choose up to three): <input type="checkbox"/> Sector A <input type="checkbox"/> Sector F <input type="checkbox"/> Sector K <input type="checkbox"/> Sector P <input type="checkbox"/> Sector U <input type="checkbox"/> Sector Z <input type="checkbox"/> Sector B <input type="checkbox"/> Sector G <input type="checkbox"/> Sector L <input type="checkbox"/> Sector Q <input type="checkbox"/> Sector V <input type="checkbox"/> Sector AA <input type="checkbox"/> Sector C <input type="checkbox"/> Sector H <input type="checkbox"/> Sector M <input type="checkbox"/> Sector R <input type="checkbox"/> Sector W <input type="checkbox"/> Sector AB <input type="checkbox"/> Sector D <input type="checkbox"/> Sector I <input type="checkbox"/> Sector N <input type="checkbox"/> Sector S <input type="checkbox"/> Sector X <input type="checkbox"/> Sector AC <input type="checkbox"/> Sector E <input type="checkbox"/> Sector J <input type="checkbox"/> Sector O <input type="checkbox"/> Sector T <input type="checkbox"/> Sector Y <input type="checkbox"/> Sector AD			
D. Certification Do you certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted? Based on your inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, do you certify that the information submitted is, to the best of your knowledge and belief, true, accurate, and complete? Do you certify that you are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations? Print Name: _____ Signature: _____ Date: _____		8. Additional Facility/Site Requirements: a. Based on the instructions provided in Addendum A of the MSGP, have the eligibility criteria for "listed species" and critical habitat been met? <input type="checkbox"/> Yes <input type="checkbox"/> No b. Based on the instructions provided in Addendum B of the MSGP, have the eligibility criteria for protection of historic properties been met? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Instructions for Completing the Notice of Intent for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY Under the Multi-sector General Permit

Who Must File a Notice of Intent?

Under the provisions of section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122, Federal law prohibits "point source" discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. If you operate a facility which is described in Part 1.2.1. of the Multi-sector General Permit (MSGP) or if you have been designated as needing permit coverage for your storm water discharges by your NPDES permitting authority, and you meet the eligibility requirements in Part 1 of the permit, you may satisfy your CWA obligation for permit coverage by submitting a completed NOI to obtain coverage under the MSGP. If you have questions about whether you need a permit under the NPDES Storm Water Program, contact your NPDES permitting authority (i.e., your EPA Regional storm water coordinator or your State water pollution control agency).

One NOI must be submitted for each facility or site for which you are seeking permit coverage. Only one NOI need be submitted to apply for coverage for all of your activities at each facility (e.g., you do not need to submit a separate NOI for each type of industrial activity located at a facility or industrial complex, provided your storm water pollution prevention plan covers each area for which you are an operator). Finally, the NOI must be submitted in accordance with the deadlines established in Part 2.1 of the MSGP.

When to File the NOI Form

DO NOT FILE THE NOI UNTIL YOU HAVE OBTAINED A COPY OF THE MULTI-SECTOR GENERAL PERMIT. You will need it to determine your eligibility, prepare your storm water pollution prevention plan, and correctly answer all questions on the NOI form — all of which must be done before you can sign the certification statement on the NOI in good faith (and without risk of committing perjury).

If you have a new facility or are the new operator of an existing facility, this form must be postmarked at least 48 hours before you need permit coverage. If your facility was covered under the 1995 Multi-sector General Permit or if you are currently operating without a permit, see Part 2.1 of the MSGP for your deadlines. CAUTION: You must allow enough lead time to gather the information necessary to complete the NOI (especially that related to determining eligibility with regards to endangered species and historic properties) and prepare the pollution prevention plan required by Part 4 of the MSGP prior to submitting your NOI.

Where to File the NOI Form

NOIs must be sent to the following address (do not send Storm Water Pollution Prevention Plans (SWPPPs) to this address):

Storm Water Notice of Intent (4203)
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

(For overnight/express delivery of NOIs, add the phone number (202) 260-9541)

NOTE: While not currently available, EPA is exploring the possibility of offering the option to complete the NOI form electronically online via the Internet. If this option does become available, directions will be posted on EPA's web site. To check on the availability of the alternative Online NOI, please visit <http://www.epa.gov/ow/sw>. If the Online NOI is not available, you must file the NOI at the above address.

If your facility discharges through a municipal separate storm sewer system (MS4) that is permitted as a medium or large MS4 under the NPDES Storm Water Program, you must also submit a signed copy of the NOI to the operator of that MS4, in accordance with the deadlines established in Part 2.1 of the permit.

Completing the NOI Form

To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the address above.

Section A. Permit Selection

You must indicate the NPDES storm water general permit under which you are applying for coverage. Find the generic permit "number" in Part 1.1 of the permit that covers the area where your facility is located. For example, if you are located in New Mexico (except Indian Country lands), the generic number would be NMR05###. If you are located on Navajo lands in New Mexico, the generic permit number would be AZR05##1. CAUTION: You must use the correct permit number or your permit coverage will be invalid since you are not located within the coverage area for that permit.

Section B. Facility Operator Information

1. Provide the legal name of the person, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or other legal entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager.
2. Provide the telephone number of the facility operator.
3. Provide the mailing address of the facility operator. Include the street address or P.O. Box, city, state, and zip code. All correspondence regarding the permit will be sent to this address, not the facility address in Section C.
4. Indicate the legal status of the facility operator as a Federal, State, Tribal private, or other public entity (other than Federal or State). This refers only to the operator, not the owner or the land the facility or site is located upon.

Section C. Facility/Site Information

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, county, state, and zip code. Do not use a P.O. Box.
3. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from U.S. Geological Survey (USGS) quadrangle or topographic maps, by using a GPS unit, by calling 1-(888) ASK-USGS, by searching for your facility's address on several commercial "map" sites on the Internet, or by accessing EPA's web site at <http://www.epa.gov/ow/sw/industry/index.htm> and selecting Latitude and Longitude Finders under the Resources/Permit section.
4. Indicate whether the facility is located on Indian Country lands (e.g., a federally recognized reservation, etc.).
5. Indicate whether the facility or site discharges storm water into a receiving water(s) and/or a municipal separate storm sewer system (MS4). Enter the name(s) of the closest receiving water(s) and/or the MS4 (An MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body and is designed or used for collecting or conveying storm water.)
6. List your primary and secondary four digit Standard Industrial Classification (SIC) codes or 2-character Activity Codes that best describe the principal products or services provided at the facility or site identified in Section C of this application. For industrial activities defined in 40 CFR 122.26(b)(1)(i)-(ix) and (xi) that do not have SIC codes that accurately describe the principal products produced or services provided, use the following 2-character Activity Codes:
 - HZ = Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26(b)(1)(iv)];
 - LF = Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26(b)(1)(v)];
 - SE = Steam electric power generating facilities, including coal handling sites [40 CFR 122.26(b)(1)(vi)];
 - TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage [40 CFR 122.26(b)(1)(ix)]; or
 Alternatively, if your facility or site was specifically designated by your NPDES permitting authority (EPA), enter "AD."

Section D. Certification

Certification statement and signature. (CAUTION: An unsigned or undated NOI form will prevent the granting of permit coverage.) Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means:

- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 3.7 hours per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, Office of Environmental Information Services, Collection Services Division (2823), USEPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB control number of this form on any correspondence. Do not send the completed NOI form to this address.

Addendum E—Notice of Termination Form

THIS FORM REPLACES PREVIOUS FORM 3510-7 (8-92) Please See Instructions Before Completing This Form		Form Approved. OMB No. 2040-0066 Approval expires: 8-31-98
NPDES FORM		United States Environmental Protection Agency Washington, DC 20460 Notice of Termination (NOT) of Coverage Under a NPDES General Permit for Storm Water Discharges Associated with Industrial Activity
Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.		
I. Permit Information NPDES Storm Water General Permit Number: _____ Check Here If You are No Longer the Operator of the Facility: <input type="checkbox"/> Check Here if the Storm Water Discharge is Being Terminated: <input type="checkbox"/>		
II. Facility Operator Information Name: _____ Phone: _____ Address: _____ City: _____ State: _____ ZIP Code: _____		
III. Facility/Site Location Information Name: _____ Address: _____ City: _____ State: _____ ZIP Code: _____ Latitude: _____ Longitude: _____ Quarter: _____ Section: _____ Township: _____ Range: _____		
IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.		
Print Name: _____		Date: _____
Signature: _____		
Instructions for Completing Notice of Termination (NOT) Form		
Who May File a Notice of Termination (NOT) Form Permittees who are presently covered under an EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit (including the 1995 Multi-Sector Permit) for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26(b)(14), or when they are no longer the operator of the facilities. For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.	Where to File NOT Form Send this form to the the following address: Storm Water Notice of Termination (4203) 401 M Street, S.W. Washington, DC 20460 Completing the Form Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, telephone or write the Notice of Intent Processing Center at (703) 931-3230.	

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, telephone or write your EPA Regional storm water contact person.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

NPDES
FORM
3510-11



**NO EXPOSURE CERTIFICATION for Exclusion from
NPDES Storm Water Permitting**

Form Approved
OMB No. 2040-0211

C. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future?
(Please check either "Yes" or "No" in the appropriate box.) If you answer "Yes" to any of these questions
(1) through (11), you are not eligible for the no exposure exclusion.

	Yes	No
1. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	<input type="checkbox"/>	<input type="checkbox"/>
2. Materials or residuals on the ground or in storm water inlets from spills/leaks	<input type="checkbox"/>	<input type="checkbox"/>
3. Materials or products from past industrial activity	<input type="checkbox"/>	<input type="checkbox"/>
4. Material handling equipment (except adequately maintained vehicles)	<input type="checkbox"/>	<input type="checkbox"/>
5. Materials or products during loading/unloading or transporting activities	<input type="checkbox"/>	<input type="checkbox"/>
6. Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)	<input type="checkbox"/>	<input type="checkbox"/>
7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	<input type="checkbox"/>	<input type="checkbox"/>
8. Materials or products handled/stored on roads or railways owned or maintained by the discharger	<input type="checkbox"/>	<input type="checkbox"/>
9. Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	<input type="checkbox"/>	<input type="checkbox"/>
10. Application or disposal of process wastewater (unless otherwise permitted)	<input type="checkbox"/>	<input type="checkbox"/>
11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	<input type="checkbox"/>	<input type="checkbox"/>

D. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting.

I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)).

I understand that I am obligated to submit a no exposure certification form once every five years to the NPDES permitting authority and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility.

Additionally, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____

Print Title: _____

Signature: _____

Date: _____

NPDES
FORM
3510-11

Instructions for the NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Form Approved
OMB No. 2040-0211

Who May File a No Exposure Certification

Federal law at 40 CFR Part 122.26 prohibits point source discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. However, NPDES permit coverage is not required for discharges of storm water associated with industrial activities identified at 40 CFR 122.26(b)(14)(i)-(ix) and (xi) if the discharger can certify that a condition of "no exposure" exists at the industrial facility or site.

Storm water discharges from construction activities identified in 40 CFR 122.26(b)(14)(x) and (b)(15) are not eligible for the no exposure exclusion.

Obtaining and Maintaining the No Exposure Exclusion

This form is used to certify that a condition of no exposure exists at the industrial facility or site described herein. This certification is only applicable in jurisdictions where EPA is the NPDES permitting authority and must be re-submitted at least once every five years.

The industrial facility operator must maintain a condition of no exposure at its facility or site in order for the no exposure exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to storm water, the facility operator must obtain coverage under an NPDES storm water permit immediately.

Where to File the No Exposure Certification Form

Mail the completed no exposure certification form to:

Storm Water No Exposure Certification (4203)
USEPA
401 M Street, SW
Washington, D.C. 20460

Completing the Form

You must type or print, using uppercase letters, in appropriate areas only. Enter only one character per space (i.e., between the marks). Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words. One form must be completed for each facility or site for which you are seeking to certify a condition of no exposure. Additional guidance on completing this form can be accessed through EPA's web site at www.epa.gov/owm/sw. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the above address.

Section A. Facility Operator Information

1. Provide the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this certification. The name of the operator may or may not be the same as the name of the facility. The operator is the legal entity that controls the facility's operation, rather than the plant or site manager.
2. Provide the telephone number of the facility operator.
3. Provide the mailing address of the operator (P.O. Box numbers may be used). Include the city, state, and zip code. All correspondence will be sent to this address.

Section B. Facility/Site Location Information

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, county, state, and zip code. Do not use a P.O. Box number.
3. Indicate whether the facility is located on Indian Lands.
4. Indicate whether the industrial facility is operated by a department or agency of the Federal Government (see also Section 313 of the Clean Water Act).
5. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from United States Geological Survey (USGS) quadrangle or topographic maps, by calling 1-(888) ASK-USGS, or by accessing EPA's web site at <http://www.epa.gov/owm/sw/industry/index.htm> and selecting Latitude and Longitude Finders under the Resources/Permit section.

Latitude and longitude for a facility in decimal form must be converted to degrees (°), minutes ('), and seconds (") for proper entry on the certification form. To convert decimal latitude or longitude to degrees/minutes/seconds, follow the steps in the following example.

Example: Convert decimal latitude 45.1234567 to degrees (°), minutes ('), and seconds (").

- a) The numbers to the left of the decimal point are the degrees: 45°.
 - b) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006: $1234 \times 0.006 = 7.404$.
 - c) The numbers to the left of the decimal point in the result obtained in (b) are the minutes: 7'.
 - d) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result obtained in (b) by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24".
 - e) The conversion for 45.1234567 = 45° 7' 24".
6. Indicate whether the facility was previously covered under an NPDES storm water permit. If so, include the permit number.
 7. Enter the 4-digit SIC code which identifies the facility's primary activity, and second 4-digit SIC code identifying the facility's secondary activity, if applicable. SIC codes can be obtained from the Standard Industrial Classification Manual, 1987.
 8. Enter the total size of the site associated with industrial activity in acres. Acreage may be determined by dividing square footage by 43,560, as demonstrated in the following example.

Example: Convert 54,450 ft² to acres
Divide 54,450 ft² by 43,560 square feet per acre:
 $54,450 \text{ ft}^2 \div 43,560 \text{ ft}^2/\text{acre} = 1.25 \text{ acres}$.
 9. Check "Yes" or "No" as appropriate to indicate whether you have paved or roofed over a formerly exposed, pervious area (i.e., lawn, meadow, dirt or gravel road/parking lot) in order to qualify for no exposure. If yes, also indicate approximately how much area was paved or roofed over and is now impervious area.

NPDES
FORM
3510-11

Instructions for the NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Form Approved
OMB No. 2040-0211

Section C. Exposure Checklist

Check "Yes" or "No" as appropriate to describe the exposure conditions at your facility. If you answer "Yes" to **ANY** of the questions (1) through (11) in this section, a potential for exposure exists at your site and you cannot certify to a condition of no exposure. You must obtain (or already have) coverage under an NPDES storm water permit. After obtaining permit coverage, you can institute modifications to eliminate the potential for a discharge of storm water exposed to industrial activity, and then certify to a condition of no exposure.

Section D. Certification Statement

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means:

- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where

authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 1.0 hour per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, Office of Environmental Services, Collection Services Division (2823), USEPA, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number of this form on any correspondence. Do not send the completed No Exposure Certification form to this address.

Intergovernmental Panel on Climate Change (IPCC). The Inventory of U.S. Greenhouse Gas Emissions and Sinks is the latest in a series of annual U.S. submissions to the Secretariat of the United Nations Framework Convention on Climate Change.

DATES: To ensure your comments are considered for the final version of this document, please submit your comments prior to February 20, 2001. However, comments received after that date will still be welcomed and will be considered for the next edition of this report.

ADDRESSES: Comments should be submitted to Mr. Wiley Barbour at: U.S. Environmental Protection Agency, Office of Atmospheric Programs, Market Policy Branch (MC: 2175), 1200 Pennsylvania Avenue NW., Washington, DC 20460, Fax : (202) 260-6405.

If you wish to send an email with your comments, you may send the email to barbour.wiley@epa.gov.

FOR FURTHER INFORMATION CONTACT: Mr. Wiley Barbour, Environmental Protection Agency, Office of Atmospheric Programs, (202) 260-6972.

SUPPLEMENTARY INFORMATION: You may view and download the document referenced above on the US EPA global

warming site at <http://www.epa.gov/globalwarming/publications/emissions/>.

Dated: January 3, 2001.

Robert Perciasepe,
Assistant Administrator, Office of Air and Radiation.

[FR Doc. 01-567 Filed 1-8-01; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6931-4]

Final Reissuance of the National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final NPDES general permit; correction.

SUMMARY: EPA published a new version of the NPDES Storm Water Multi-Sector General Permit (MSGP) in the **Federal Register** of October 30, 2000 (65 FR 64746), which replaced the first version issued on September 29, 1995 (60 FR 50804) and amended on February 9, 1996 (61 FR 5248), February 20, 1996

(61 FR 5248), September 24, 1996 (61 FR 50020), August 7, 1998 (63 FR 42534) and September 30, 1998 (63 FR 52430). This general permit authorizes the discharge of storm water from industrial activities consistent with the terms of the permit. The permit contained incorrect dates, typographical errors and omissions from any of the following: The fact sheet portion of the final MSGP from October 30, 2000, the proposed MSGP from March 30, 2000 (65 FR 17010), or the original 1995 version of the MSGP and subsequent amendments.

FOR FURTHER INFORMATION CONTACT: Bryan Rittenhouse, 202.564.0577; rittenhouse.bryan@epa.gov.

SUPPLEMENTARY INFORMATION:

Correction

The following corrections are to be made to the **Federal Register** of October 30, 2000, (65 FR 64746):

1. On pages 64749-64752 under Table 1.—SECTORS/SUBSECTORS COVERED BY THE FINAL MSGP, the following Standard Industrial Classification (SIC) codes were omitted: 2441 and 2033-2038. Correct the appropriate entries in Table 1. to read:

TABLE 1.—SECTORS/SUBSECTORS COVERED BY THE FINAL MSGP

Subsector	SIC code	Activity represented
Sector A. Timber Products		
	2441-2449	Wood containers.
Sector E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing		
4	3271-3275	Concrete, gypsum and plaster products.
Sector U. Food and Kindred Products		
3	2032-2038	Canned, frozen and preserved fruits, vegetables and food specialties.

2. On page 64749, in column 3, remove the sentence "Certification was not received from Arizona in time for that state to be included in this permit."

3. On page 64754, column 2, paragraph 1; and on page 64756, column 1, paragraph 2, replace the date "December 29, 2000" with: "January 29, 2001."

4. On page 64766, first column, under 4. Deadlines, correct the sentences "Today's MSGP requires that permittees previously covered by the 1995 MSGP must update their SWPPPs to comply with any new requirements of today's MSGP by the date they submit their new NOIs. As noted earlier, the new NOIs are due January 29, 2001." to read:

Today's MSGP requires that permittees previously covered by the 1995 MSGP must update their SWPPPs to comply with any new requirements of today's MSGP within 90 days after the effective date of this permit which is January 29, 2001.

5. On page 64773, in column 3, under "1. Notice of Intent Address", correct the address given to read: Storm Water Notice of Intent (4203M) USEPA 1200 Pennsylvania Avenue, NW Washington, DC 20460

6. On page 64796, column 1 under Section VI.C Common Pollution Prevention Plan Requirements, Response b, replace the word "fillers" with: filters.

7. On pages 64804-64806, under Table 1-1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT, the following SIC codes were omitted: 2441, 3281, 2033-2038 and 3821-3873. Correct the appropriate entries in Table 1-1. to read:

TABLE 1.1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT

SIC code or activity represented	Activity represented
Sector A. Timber Products	
2441-2449	Wood containers.

TABLE 1.1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT—Continued

SIC code or activity represented	Activity represented
Sector E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing	
3271–3275	Concrete, gypsum and plaster products.
3281	Cut stone and stone products.
Sector U. Food and Kindred Products	
2032–2038	Canned, frozen and preserved fruits, vegetables and food specialties.
Sector AC. Electronic, Electrical, Photographic and Optical Goods	
3812–3873	Measuring, analyzing and controlling instrument; photographic and optical goods, watches and clocks.

8. On pages 64804–64806 under Table 1–1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT, Sectors Z and AA were omitted. Add this Sector information to Table 1–1 so it reads:

TABLE 1.1.—SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT

SIC code or activity represented	Activity represented
Sector Z: Leather Tanning and Finishing	
3111	Leather tanning and finishing.
Sector AA: Fabricated Metal Products	
3411–3499	Fabricated metal products, except machinery and transportation equipment.
3911–3915	Jewelry, silverware, and plated ware.

9. On page 64809, in the footnotes at the bottom of the second column under footnote 2, replace “Part 1.2.2.3” with “Part 1.2.2.1.3,” so footnote 2 reads:
 2 The provisions specified in Part 1.2.2.1.3 and Part 1.2.4 related to documenting New Source reviews are requirements of Federal programs under the National Environmental Policy Act of 1969 and will not apply to such facilities in the event that authority for the NPDES program has been assumed by the State/Tribe agency and administration of this permit has been transferred to the State/Tribe.

10. On page 64810 under TABLE 2–1.—DEADLINES FOR NOI SUBMITTAL, correct the date under Deadline to read:

TABLE 2–1.—DEADLINES FOR NOI SUBMITTAL

Category	Deadline
1. Existing discharges covered under the 1995 MSGP (see also Part 2.1.2—Interim Coverage).	January 29, 2001.

11. On page 64811, column 1, under part 2.2.4.1, remove the words “or proposed” so that the sentence reads:
 Based on the instructions in Addendum A, whether any listed threatened or endangered species, or designated critical habitat, are in proximity to the storm water discharges or storm water discharge-related activities to be covered by this permit;

12. On page 64824, third column, under 6.G.4.4, correct the definition of Reclamation Phase to read:

Reclamation phase—activities undertaken following the cessation of mining intended to return the land to an appropriate post-mining land use in order to meet applicable mined land reclamation requirements.

13. On page 64827, under Table G–3, add “(H)” after Lead in column 4, row 9 (under the headings), and add “Lead (H)” in column 4, row 8 so those rows now read:

TABLE G–3.—ADDITIONAL MONITORING REQUIREMENTS FOR DISCHARGES FROM WASTE ROCK AND OVERBURDEN PILES FROM ACTIVE ORE MINING OR DRESSING FACILITIES

[Supplemental Requirements]

Type of ore mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, total
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Copper, Lead, Zinc, Gold, Silver and Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H).

14. On page 64831, first column, under 6.J.4.4, correct the definition of Reclamation Phase to read:

Reclamation phase—activities undertaken following the cessation of mining intended to return the land to an

appropriate post-mining land use in order to meet applicable mined land reclamation requirements.

15. On page 64845, under Table S–1.—SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK

MONITORING, realign the table elements that were present to read (entire table is reproduced):

BILLING CODE 6560–50–U

Table S-1. SECTOR-SPECIFIC NUMERIC LIMITATIONS AND BENCHMARK

MONITORING			
Sector of Permit Affected / Supplemental Requirements			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration¹	Numeric Limitation
Facilities at airports that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport facility that collect runoff from areas where deicing/anti-icing activities occur (SIC 45XX)	Biochemical Oxygen Demand (BOD ₅)	30 mg/L	--
	Chemical Oxygen Demand (COD)	120.0 mg/L	--
	Ammonia	19 mg/L	--
	pH	6.0 to 9.0 s.u.	—

¹ Monitor once/quarter for the year 2 and year 4 monitoring years.

16. On page 64873, Addendum D-Notice of Intent Form, under section A. Permit Selection, correct the sentence to read:

Permit number assigned to your facility under the previous permit, or the generic permit number for your location (from part 1.1 of the MSGP):

17. On page 64874, column 1, under "Where to File the NOI Form", add the following language before the sentence "You must indicate the NPDES storm water general permit under which you are applying for coverage.":

If your facility was previously covered by the MSGP and you are transferring to the October 29, 2000 version MSGP, you must indicate your original MSGP registration number that was assigned to you by the NOI Center.

For new filers, i.e., those facilities not previously covered by the MSGP, do the following:

18. On page 64874, in column 1, under "Where to File the NOI Form", correct the phone number, "(202) 260-9541" to read:

(202) 564-9537

19. On page 64875, under "Instructions for Completing the Notice of Termination (NOT) Form", column 2, replace the address given with:

Storm Water Notice of Termination
(4203M)

USEPA

1200 Pennsylvania Avenue, NW
Washington, DC 20460

20. On page 64875, under "Instructions for Completing the Notice of Termination (NOT) Form", column 2, correct the phone number "(703) 931-3230" to read:

(301) 495-4145

21. On page 64876, in column 2, under "Paperwork Reduction Act Notice", replace both addresses given with the single address:

Director, Office of Environmental
Services

Collection Services Division (2823)
USEPA

1200 Pennsylvania Avenue, NW
Washington, DC 20460

Signed and issued this 15th day of December, 2000.

Robert Goetzl,

*Acting Director, Office of Ecosystem
Protection, Region 1.*

Signed and issued this 21st day of December, 2000.

Kathleen C. Callahan,

*Director, Division of Environmental Planning
and Protection, Region 2.*

Signed and issued this 15th day of December, 2000.

Jon M. Capacasa,

*Acting Director, Water Protection Division,
Region 3.*

Dated: December 20, 2000.

A. Stanley Meiburg,

Deputy Regional Administrator, Region 4.

Signed and issued this 15th day of December, 2000.

Sam Becker,

*Acting Director, Water Quality Protection
Division, Region 6.*

Signed and issued this 18th day of December, 2000.

Stephen S. Tuber,

*Acting Assistant Regional Administrator,
Office of Partnerships and Regulatory
Assistance, Region 8.*

Signed and issued this 15th day of December, 2000.

Alexis Strauss,

Director, Water Division, Region 9.

Signed and issued this 15th day of December, 2000.

Randall F. Smith,

Director, Office of Water, Region 10.

[FR Doc. 01-566 Filed 1-8-01; 8:45 am]

BILLING CODE 6560-50-U

FEDERAL COMMUNICATIONS COMMISSION

Notice of Public Information Collection(s) Being Reviewed by the Federal Communications Commission, Comments Requested

January 2, 2001.

SUMMARY: The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the

Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

DATES: Written comments should be submitted on or before March 12, 2001. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all comments to Les Smith, Federal Communications Commissions, 445 12th Street, SW., Room 1-A804, Washington, DC 20554 or via the Internet to lesmith@fcc.gov.

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collections contact Les Smith at (202) 418-0217 or via the Internet at lesmith@fcc.gov.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060-0957.

Title: Wireless Enhanced 911 Service, Fourth MO&O.

Agency Form Number(s): None.

Type of Review: Extension of currently approved collection.

Respondents: Business or other for-profit, not-for-profit institutions, state or local governments.

Number of Respondents: 2,500.

Estimated Time Per Response: 3.

Frequency of Response: Once.

Total Annual Burden: 7,500 hours.

Total Annual Cost: 0.

Needs and Uses: The information required to be included in a successful waiver request will be used to assist the Commission in judging whether the request has merit.

Federal Communications Commission.

Magalie Roman Salas,

Secretary.

[FR Doc. 01-580 Filed 1-8-01; 8:45 am]

BILLING CODE 6712-01-U

electronic comments submitted during an applicable comment period, is available for inspection from 8 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The docket is located at the U.S. EPA Region V Office, Environmental Protection Agency, Waste, Pesticides and Toxics Division, Pesticides and Toxics Substances Branch, Toxics Program Section (DT-8J), 77 West Jackson Blvd, Chicago, IL 60604.

II. Background

On October 28, 1992, the Housing and Community Development Act of 1992, Public Law 102-550, became law. Title X of that statute was the Residential Lead-Based Paint Hazard Reduction Act of 1992. That Act amended TSCA (15 U.S.C. 2601 *et seq.*) by adding Title IV (15 U.S.C. 2681-2692), entitled *Lead Exposure Reduction*. Section 402 of TSCA (15 U.S.C. 2682) authorizes and directs EPA to promulgate final regulations governing lead-based paint activities in target housing, public and commercial buildings, bridges, and other structures. Under section 404 of TSCA, a State may seek authorization from EPA to administer and enforce its own lead-based paint activities program. On August 29, 1996, EPA issued section 402/404 regulations (40 CFR part 745) governing lead-based paint activities in target housing and child-occupied facilities. States and Indian Tribes that choose to apply for program authorization must submit a complete application to the appropriate Regional EPA Office for review. To receive EPA approval, a State or Indian Tribe must demonstrate that its program is at least as protective of human health and the environment as the Federal program, and provides for adequate enforcement (section 404(b) of TSCA, 15 U.S.C. 2684(b)). EPA's regulations (40 CFR part 745, subpart Q) provide the detailed requirements a State or Indian Tribal program must meet in order to obtain EPA approval.

Under these regulations, a State must demonstrate that it has the legal authority and ability to immediately implement certain elements, including legal authority for accrediting training providers, certification of individuals, work practice standards and pre-renovation notification, authority to enter, and flexible remedies. In order to receive final approval, the State must be able to demonstrate that it is able to immediately implement the remaining performance elements, including training, compliance assistance, sampling techniques, tracking tips and complaints, targeting inspections, follow up to inspection reports, and

compliance monitoring and enforcement.

III. Federal Overfiling

Section 404(b) of TSCA makes it unlawful for any person to violate, or fail or refuse to comply with, any requirement of an approved State or Indian Tribal program. Therefore, EPA reserves the right to exercise its enforcement authority under TSCA against a violation of, or a failure or refusal to comply with, any requirement of an authorized State or Indian Tribal program.

IV. Withdrawal of Authorization

Pursuant to section 404(c) of TSCA, the EPA Administrator may withdraw a State or Indian Tribal lead-based paint activities program authorization, after notice and opportunity for corrective action, if the program is not being administered or enforced in compliance with standards, regulations, and other requirements established under the authorization. The procedures EPA will follow for the withdrawal of an authorization are found at 40 CFR 745.324(i).

V. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before certain actions may take effect, the agency promulgating the action must submit a report, which includes a copy of the action, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of this document in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects

Environmental protection, Hazardous substances, Lead, Reporting and recordkeeping requirements.

Dated: February 6, 2001.

David A. Ullrich,

Acting Regional Administrator, Region V.

[FR Doc. 01-7285 Filed 3-22-01; 8:45 am]

BILLING CODE 6560-50-S

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6953-7]

Final Reissuance of the National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Final NPDES general permit; correction.

SUMMARY: EPA published a new version of the NPDES Storm Water Multi-Sector General Permit (MSGP) in the **Federal Register** of October 30, 2000 (65 FR 64746), which replaced the first version issued on September 29, 1995 (60 FR 50804) and amended on February 9, 1996 (61 FR 5248), February 20, 1996 (61 FR 5248), September 24, 1996 (61 FR 50020), August 7, 1998 (63 FR 42534) and September 30, 1998 (63 FR 52430). This general permit authorizes the discharge of storm water from industrial activities consistent with the terms of the permit. The permit contained incorrect dates, typographical errors and omissions from any of the following: the fact sheet portion of the final MSGP from October 30, 2000, the proposed MSGP from March 30, 2000 (65 FR 17010), or the original 1995 version of the MSGP and subsequent amendments. This correction is subsequent to an initial correction notice published January 9, 2001 (66 FR 1675).

FOR FURTHER INFORMATION CONTACT: Bryan Rittenhouse, 202-564-0577; rittenhouse.bryan@epa.gov.

SUPPLEMENTARY INFORMATION:

Correction

The following corrections are to be made to the **Federal Register** of October 30, 2000, (65 FR 64746):

1. On page 64758, first column, under "2. Deadlines", correct the second paragraph to read:

Facilities currently covered by the 1995 MSGP who cannot immediately determine if they are eligible for coverage under today's reissued MSGP may nevertheless continue their previous coverage for up to 270 days, providing the permittee submits to EPA an application for an individual permit by January 29, 2001. He must also submit a written notification before January 29, 2001, that he needs the extension. The notification alerts the permitting authority of the need for continued coverage under the 1995 MSGP (and also that the permittee may

need some help in submitting the application), and it must include the reason why the extension is needed (e.g., to conduct Endangered Species Act or National Historic Preservation Act investigations, or intentionally obtain an individual permit). Applications and notifications must be sent to the appropriate Regional office as listed in part VI.F.2 of this portion of the permit. This interim coverage enables permittees to assess their eligibility for the MSGP-2000 and, if necessary, still meet the 180 day lead time required for applications for individual permits. If a permittee subsequently determines he is eligible for coverage under the MSGP-2000 before the 270 day extension is up, he may withdraw his individual permit application and submit an NOI for coverage under the MSGP-2000.

2. On page 64766, first column, under "4. Deadlines", insert "in writing, to the appropriate Regional office (listed in part VI.F.2), for" into the third sentence so that it reads:

However, a permittee may request, in writing, to the appropriate Regional office (listed in part VI.F.2), for an extension for the SWPPP update not to exceed 270 days from the expiration date of the 1995 MSGP.

3. On page 64779, second column, under "Section 2.1 Notice of Intent (NOI) Deadlines", Replace the first sentence following "Response:" with: The fact sheet clarifies that SWPPPs are to be prepared, in general, by January 29, 2001.

4. On page 64790, first column, under "Response c:", correct the second sentence to read:

He then has up to 180 additional days of interim coverage under the MSGP while he conducts the consultation and determines whether he meets the criteria for coverage under the MSGP-2000, providing he requests in writing to the appropriate Regional office for the extension.

5. On page 64808, second column, under "1.2.3.6 *Endangered and Threatened Species or Critical Habitat Protection.*", replace the first sentence with:

You are not authorized for discharges or discharge-related activities that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.

6. On page 64808, second column, under part 1.2.3.6.1, delete the phrase

"or proposed to be designated" from the first sentence.

7. On page 64808, third column, under part 1.2.3.6.3.4, replace the phrase "listed species or critical habitat would be adversely affected." with: the discharges and discharge-related activities will jeopardize the continued existence of any species or result in the adverse modification or destruction of critical habitat.

8. On page 64809, first column, under part 1.2.3.6.6, delete the phrase "or proposed to be designated" from the first sentence.

9. On page 64810, second column, under part 2.1.2.2, in the first sentence, replace the phrase "under this permit" with:

for continued coverage under the previous permit

10. On page 64810, second column, under part 2.1.2.2, after the first sentence, add the following sentence:

A written notification must also be submitted to the Director explaining why you need the extended coverage (e.g., conducting Endangered Species Act or National Historic Preservation Act investigations, or applying for an individual permit). If you subsequently determine you are eligible for coverage under the MSGP-2000 before the 270 day extension is up, you may withdraw your individual permit application and submit a notice of intent for coverage under the MSGP-2000. If you cannot determine eligibility for the MSGP-2000 by the end of 270 days (July 29, 2001) your alternative permit coverage must be finalized or your discharges will be unauthorized.

11. On page 64825, second column, under "6.G.6 Storm Water Pollution Prevention Plan (SWPPP) Requirements", delete the sentence: "In addition to the following requirements, you must also comply with the requirements listed in Part 4."

12. On page 64825, second column, under "6.G.6.1 SWPPP Requirements for Active and Temporarily Inactive Metal Mining Facilities", add the following sentence:

For Part 6.G.6.1 only, in addition to the following requirements, you must also comply with the requirements listed in Part 4.

13. On page 64832, first column, under "6.K.2 Industrial Activities Covered by Sector K", add the following paragraph after the one found there:

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are considered inactive and do not require permits.

14. On page 64817, under Table 5-1, footnote 3, delete the word "ethylene".

15. On page 64817, in Table 5-1, column 2, following the words "Scrap Recycling", add the following: and Waste Recycling Facilities

16. On page 64837, first column, following "6.N.4.2 Scrap", insert the word:

Recycling

17. On page 64838, third column, after "6.N.5 Monitoring and Reporting Requirements. (See also Part 5)", add the following:

The monitoring and reporting requirements given in TABLE N-1 apply only to scrap recycling and waste recycling facilities (non-source separated facilities only).

18. On page 64839, in Table 5N-1, column 1, following the words "Scrap Recycling", add the following: and Waste Recycling

19. On page 64845, column 3, under "6.S.6 Monitoring and Reporting Requirements (See also Part 5)", add the following language:

Monitor per the requirements in Table S-1, 4 times only during the three month period of December, January and February when deicing activities are occurring, for the year 2 and year 4 monitoring years.

20. On page 64845, under table S-1, delete the footnote: "1 Monitor once/quarter for the year 2 and 4 monitoring years."

21. On page 64799, first column, under "Response y", replace the entire paragraph with:

EPA will keep the visual monitoring requirement waiver for representative outfalls that was contained in the 1995 MSGP. This applies when two or more outfalls at a facility discharge substantially identical effluents. When this occurs, the permittee can perform a visual examination of just one of the discharges, providing he describes in his SWPPP why the other outfalls are expected to discharge essentially the same effluents.

22. On page 64818, third column, in "5.2.4 Representative Outfalls-Essential Identical Discharges", replace the word "Essential" with:

Essentially

23. On page 64818, third column, under "5.2.4 Representative Outfalls-Essential Identical Discharges", add the following sentence after the first sentence:

The same outfall monitoring waiver for substantially identical discharges applies to quarterly visual monitoring as well.

24. On page 64873, Addendum D-Notice of Intent Form, under "A. Permit Selection", correct the sentence to read:

If new, enter generic permit, otherwise enter previous permit:

25. On page 64874, column 1, under "Section A. Permit Selection", replace the language in both the original version published on October 29, 2000 and the corrected version published on January 9, 2001 with the following:

If your facility was previously covered by the MSGP 1995 Permit, and you are transferring to the October 29, 2000 version of the MSGP (MSGP 2000), then you must indicate the MSGP 1995 permit number assigned to you by the Storm Water Notice of Intent Center.

If your facility was not previously covered by the MSGP 1995 Permit, and you are applying for new coverage under the MSGP 2000 Permit, you must indicate the "generic" permit number covering your facility area. You will find your generic permit number in the MSGP 2000 Permit, **Federal Register**, Vol. 65, No. 210, Monday, October 30, 2000, on pages 64802-64803. (As an example, the generic permit number for an industrial site in Puerto Rico would be PRR05*###.) The MSGP 2000 Permit is available online at <http://www.epa.gov/owm/sw/industry/msgp/msgp2000.pdf>.

26. On page 64871, column 1, under "Puerto Rico, Commonwealth of", delete "Deputy: Berenice Sueiro, E-Mail: bsueiro@prshpo.prstar.net" and replace "Ms. Lilliane D. Lopez" with:

Ms. Enid Torregrosa de la Rosa

27. On page 64826, column 3, under "6.G.6.2.4.4 Capping", replace "6.G.6.1.7" with:

6.G.6.1.6.4

28. On page 64826, column 3, under "6.G.6.2.4.5 Treatment", replace "6.G.6.1.8" with:

6.G.6.1.6.5

Region 1

Signed and issued this 30th day of February 2001.

Susan Studlien,

Deputy Director, Office of Ecosystem Protection.

Region 2

Signed and issued this 28th day of January 2001.

George Pavlou,

Director, Division of Environmental Planning and Protection.

Signed this 2nd day of February, 2001.

Jon M. Capacasa,

Deputy Director, Water Protection Division, Region 3.

Dated: February 12, 2001

A. Stanley Meiburg,

Acting Regional Administrator, Region 4.

Region 6

Signed and issued this 1st day of February 2001.

Oscar Ramirez, Jr.,

Acting Director, Water Quality Protection Division.

Region 8

Signed and issued this 26th day of January 2001.

Stephen S. Tuber,

Acting Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance.

Region 9

Signed and issued this 24th day of January 2001.

Alexis Strauss,

Director, Water Division.

Region 10

Signed and issued this 29th day of January 2001.

Robert Robichaud,

Acting Director, Office of Water.

BILLING CODE 6560-50-P

Instructions for Completing the Notice of Intent for Storm Water Discharges Associated with INDUSTRIAL ACTIVITY Under the Multi-sector General Permit

Who Must File a Notice of Intent?

Under the provisions of section 402(p) of the Clean Water Act (CWA) and regulations at 40 CFR Part 122, Federal law prohibits "point source" discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. If you operate a facility which is described in Part 1.2.1. of the Multi-sector General Permit (MSGP) or if you have been designated as needing permit coverage for your storm water discharges by your NPDES permitting authority, and you meet the eligibility requirements in Part 1 of the permit, you may satisfy your CWA obligation for permit coverage by submitting a completed NOI to obtain coverage under the MSGP. If you have questions about whether you need a permit under the NPDES Storm Water Program, contact your NPDES permitting authority (i.e., your EPA Regional storm water coordinator or your State water pollution control agency).

One NOI must be submitted for each facility or site for which you are seeking permit coverage. Only one NOI need be submitted to apply for coverage for all of your activities at each facility (e.g., you do not need to submit a separate NOI for each type of industrial activity located at a facility or industrial complex, provided your storm water pollution prevention plan covers each area for which you are an operator). Finally, the NOI must be submitted in accordance with the deadlines established in Part 2.1 of the MSGP.

When to File the NOI Form

DO NOT FILE THE NOI UNTIL YOU HAVE OBTAINED A COPY OF THE MULTI-SECTOR GENERAL PERMIT. You will need it to determine your eligibility, prepare your storm water pollution prevention plan, and correctly answer all questions on the NOI form — all of which must be done before you can sign the certification statement on the NOI in good faith (and without risk of committing perjury).

If you have a new facility or are the new operator of an existing facility, this form must be postmarked at least 48 hours before you need permit coverage. If your facility was covered under the 1995 Multi-sector General Permit or if you are currently operating without a permit, see Part 2.1 of the MSGP for your deadlines. CAUTION: You must allow enough lead time to gather the information necessary to complete the NOI (especially that related to determining eligibility with regards to endangered species and historic properties) and prepare the pollution prevention plan required by Part 4 of the MSGP prior to submitting your NOI.

Where to File the NOI Form

NOIs must be sent to the following address (do not send Storm Water Pollution Prevention Plans (SWPPPs) to this address):

Storm Water Notice of Intent (4203M)
USEPA
1201 Constitution Avenue
Washington, DC 20460

(For overnight/express delivery of NOIs, add the phone number (202) 564-9537)

NOTE: While not currently available, EPA is exploring the possibility of offering the option to complete the NOI form electronically online via the Internet. If this option does become available, directions will be posted on EPA's web site. To check on the availability of the alternative Online NOI, please visit <http://www.epa.gov/owm/sw>. If the Online NOI is not available, you must file the NOI at the above address.

If your facility discharges through a municipal separate storm sewer system (MS4) that is permitted as a medium or large MS4 under the NPDES Storm Water Program, you must also submit a signed copy of the NOI to the operator of that MS4, in accordance with the deadlines established in Part 2.1 of the permit.

Completing the NOI Form

To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the address above.

Section A. Permit Selection

If your facility was previously covered by the MSGP 1995 Permit, and you are transferring to the October 29, 2000 version of the MSGP (MSGP 2000), then you must indicate the MSGP 1995 permit number assigned to you by the Storm Water Notice of Intent Center.

If your facility was not previously covered by the MSGP 1995 Permit, and you are applying for new coverage under the MSGP 2000 Permit, you must indicate the "generic" permit number covering your facility area. You will find your generic permit number in the MSGP 2000 Permit, Federal Register, Vol. 65, No. 210, Monday, October 30, 2000, on pages 64802-64803. (As an example, the generic permit number for an industrial site in Puerto Rico would be PRR05###.) The MSGP 2000 Permit is available online at <http://www.epa.gov/owm/sw/industry/msgp/msgp2000.pdf>.

Section B. Facility Operator Information

1. Provide the legal name of the person, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or other legal entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager.
2. Provide the telephone number of the facility operator.
3. Provide the mailing address of the facility operator. Include the street address or P.O. Box, city, state, and zip code. All correspondence regarding the permit will be sent to this address, not the facility address in Section C.
4. Indicate the legal status of the facility operator as a Federal, State, Tribal, private, or other public entity (other than Federal or State). This refers only to the operator, not the owner of the

land and the facility or site is located upon.

Section C. Facility/Site Information

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, county, state, and zip code. Do not use a P.O. Box. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from U.S. Geological Survey (USGS) quadrangle or topographic maps, by using a GPS unit, by calling 1-(888) ASK-USGS, by searching for your facility's address on several commercial "map" sites on the Internet, or by accessing EPA's web site at <http://www.epa.gov/owm/sw/industry/index.htm> and selecting Latitude and Longitude Finders under the Resources/Permit section.
3. If you are filing as a co-permittee and a storm water general permit number has been issued to the co-permittee, enter the number in the space provided.
4. Indicate whether the facility is located on Indian Country lands (e.g., a federally recognized reservation, etc.).
5. Indicate whether the facility or site discharges storm water into a receiving water(s) and/or a municipal separate storm sewer system (MS4). Enter the name(s) of the closest receiving water(s) and/or the MS4 (An MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body and is designed or used for collecting or conveying storm water.)
6. List your primary and secondary four 4-digit Standard Industrial Classification (SIC) codes or 2-character Activity Codes that best describe the principal products or services provided at the facility or site identified in Section C of this application. For industrial activities defined in 40 CFR 122.26(b)(1)(i)-(ix) and (xi) that do not have SIC codes that accurately describe the principal products produced or services provided, use the following 2-character Activity Codes: HZ = Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA [40 CFR 122.26(b)(1)(iv)]; LF = Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under subtitle D of RCRA [40 CFR 122.26(b)(1)(v)]; SE = Steam electric power generating facilities, including coal handling sites [40 CFR 122.26(b)(1)(vi)]; TW = Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage [40 CFR 122.26(b)(1)(ix)]; or Alternatively, if your facility or site was specifically designated by your NPDES permitting authority (EPA), enter "AD."

Section D. Certification

Certification statement and signature. (CAUTION: An unsigned or undated NOI form will prevent the granting of permit coverage.) Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

- For a corporation: by a responsible corporate officer, which means:
- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
 - (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- For a partnership or sole proprietorship: by a general partner or the proprietor; or
- For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 3.7 hours per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, Office of Environmental Information Services, Collection Services Division (2823), USEPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB control number of this form on any correspondence. Do not send the completed NOI form to this address.

Attachment 3

Non-Discharging Basins

Administration Area

Product Terminal

API Unit Area

Process Area

Evaporation Pond Area

Tank Farm

Raw Water Pond

Landfill Area

Fire Training Area

Internal Area

Non-Impacted Basins or Basins with no Process Impact

Northern Area

Stormwater Basins

Outfall 1

Outfall 2

Non-Discharging Basins

Non-discharging basins are generally characterized below, a listing of significant materials follows the general descriptions below.

Administration Area Basin

Characteristics

The Administration Area contains the administration offices, parking areas, the warehouse, shop areas, and drum storage racks. The basin is characterized by paved roads and parking areas with some natural materials and culverts.

Material Found within this Basin

The significant material that is contained within this basin are the petroleum and other maintenance products stored at the shop and warehouse buildings, normal parking lot contaminants, welding materials and electrical equipment. The county road runs along the outside of this basin. Runoff from this basin reports to the natural retention area.

Product Terminal

Characteristics

The Product Terminal Area contains the loading and unloading racks, for both final and crude products, an auxiliary warehouse that houses the 90-day hazardous waste storage area, LPG tanks as well as other storage tanks, and a Class I injection well. The basin is characterized by paved roads and parking areas with some natural drainage, and culverts.

Material Found within this Basin

The significant material that is contained within this basin are petroleum products contained in tanks, products stored within the auxiliary warehouse including hazardous waste, wastewater injected at the Class I well, and normal parking lot contaminants. The county road runs along the outside of this basin. Runoff from this basin reports to the natural retention area.

Process Area

Characteristics

The Process Area contains the polymerization unit, sulfur ox unit, DHT unit, treated unit, spent caustic unit, crude unit, FCC unit, gasoline unit and the laboratory. This area also contains the flare and associated equipment. Pipe racks run through this unit carrying petroleum products.

Material Found within this Basin

The significant material that is contained within this basin are petroleum products and associated chemicals for processing petroleum products. All water from this area drains to the API Unit for further treatment.

API Unit

Characteristics

The API unit area contains runoff from the process areas around the API units as well as the API unit. This area is used to manage water from the process areas and discharge to the aeration lagoons.

Material Found within this Basin

The significant material that is contained within this basin are petroleum products and associated chemicals for processing petroleum products. All water from this area drains from the API Unit to the aeration lagoons.

Evaporation Pond Area

Characteristics

The evaporation pond area is used to manage process water so there is no discharge. The ponds are lined with HDPE liner and are managed through pumping.

Material Found within this Basin

The significant material that is contained within this basin is process water contained in ponds.

Tank Farm

Characteristics

The tank farm contains all major and minor tanks for storing petroleum products during and after processing. The tanks are contained using berms designed to meet the requirements for spill control and countermeasure.

Material Found within this Basin

The significant material that is contained within this basin are petroleum products. All water from this area is contained inside the berms around the tanks.

Raw Water Pond

Characteristics

The raw water pond is used to store water for use in the process, the raw water has not come into contact with any process materials. Water in this pond comes from the pumphouse at the river.

Material Found within this Basin

There are no significant materials within this basin.

Landfill Area

Characteristics

The landfill area contains debris from the operations. No hazardous or special wastes are disposed of at the landfill.

Material Found within this Basin

The significant materials found within this basin include solid non-hazardous waste materials such as operational and construction debris, shipping materials, wood, paper, etc. This area is contained using berms and runoff does not leave the general area.

Fire Training Area

Characteristics

This area consists of tanks – both empty and containing petroleum products, buildings, roadways, etc. Used to enact fire training drills and simulations. The area is used by both the Bloomfield staff and by the local cities of Farmington and Bloomfield.

Material Found within this Basin

The significant materials found within this basin include fire water and petroleum tanks that are usually empty unless a drill is underway. Fire fighting water is seen as an allowable stormwater discharge, however this area is enclosed and does not discharge.

Internal Area

Characteristics

The internal area is characterized by internal roadways, the north bone yard, the cooling towers, substations, and the filter house. The area is contained by a berm that extends around the outside perimeter of the facility, effectively separating Bloomfield from the surrounding area.

Material Found within this Basin

This area contains petroleum products and chemicals used in the filter house and cooling towers.

Significant Materials

Atmospheric Storage Tanks

Tank No.	Contents	Maximum Volume (barrels)
3	Premium No Lead Gasoline Sales	10,000
4	Premium No Lead Gasoline Sales	10,000
5	Isomerate	10,000
8	Slop oil	500
9	Slop oil	500

Tank No.	Contents	Maximum Volume (barrels)
10	Spent caustic	400
11	Reformate	55,000
12	Poly/Cat mix	55,000
13	No Lead Gasoline	30,000
14	No Lead Gasoline	30,000
17	Reduced crude	40,000
18	Off-Road Diesel Sales	55,000
19	ULS Diesel Sales	36,000
20	Out of Service	5,000
22	Out of Service	1,500
23	Base Gasoline	40,000
24	Diesel Rundown	10,000
25	Diesel Rundown	10,000
26	Naphtha	4,000
27	Residual oil	10,000
28	Crude oil	80,000
29	LCO/FCC Slop	17,000
30	Sub-Grade Blend	17,000
31	Crude oil	110,000
32	Sub-Grade Sales	20,000
35	Reformer feed	55,000
36	Poly/Cat mix	55,000
37	Recovered Water	120
38	Recovered Water	300
41	Crude oil	2,800
43	Crude oil	700
44	Sweet Naphtha	2,000
45	MTBE	5,000

Pressurized Storage Tanks

Tank No.	Contents	Maximum Volume (barrels)
B-12	Out of Service	692
B-13	LPG	500
B-14	LPG	500
B-15	LPG	714
B-16	LPG	714
B-17	LPG	714
B-18	LPG	714
B-19	LPG	714
B-20	LPG	714
B-21	LPG	714
B-22	LPG	714
B-23	LPG	714

Chemical Inventory

Product	Max. Volume	Daily Usg.	Ingredients	Location	Phys. State
Acetone	4 - 5gal. Pails	20gal./yr	Acetone	Lab	Liquid
Acetylene (WTL)	3 - 207 lb cylinders	4cyl./yr	Acetylene	Whse. Yrd./ Weld Sh.	Gas
Acetylene (AC150)	1 - 150 lb cylinders	1cyl./yr	Acetylene	Whse. Yrd./ Weld Sh.	Gas
Ammonium Thiosulfate	2 - 250 gal tote	0	Ammonium Thiosulfate	SRU Bldg./Whse. Yrd.	Liquid
Antifreeze/coolant	3 - 55 gal drums	1gal./day	Ethylene Glycol. Water	Whse. Yrd.	Liquid
Antifreeze/coolant	10 - 1gal jugs	2gal./mon	Ethylene Glycol. Water	Whse. Yrd.	Liquid
Argon (T size)	2 - 177 lb cylinders	2cyl./yr	Argon	Lab	Gas
Bio - Flora	250 gal tote	3gal./day	Humega, Fulvic Acid, Bioscrubber II	API Separator	Liquid
Carbon Dioxide	4 - 20 lb cylinders	4cyl./yr	Carbon Dioxide	Lab	Gas
Caustic	4500 gal	18.7gal./day	Sodium Hydroxide, Water	Treater/SRU	Liquid
Valero OGA76215	2000 gal tank	1/2gal./day	Solvent Naphtha	Terminals	Liquid
Chevron OGA72015	2000 gal tank	3.5gal./day	Solvent Naphtha	Terminals	Liquid

Product	Max. Volume	Daily Usg.	Ingredients	Location	Phys. State
Chlorine	5 - 150# cylinder	10/yr	Chlorine	Clg. Twrs./Whse. Yrd.	Gas
Chlorine	1 - 2000# cylinder	1/yr	Chlorine	Cooling tower	Gas
Conoco 6576	2000 gal tank	8.5gal./day	Solvent Naphtha	Terminals	Liquid
Conoco 68	1 - 5 gal pails	35gal./yr	Superier Hydraulic Oil	Whse. Yrd.	Liquid
Conoco SAE 15W-40	quart jugs	24qrts./yr	Proprietary Blend	Whse. Yrd.	Liquid
Conoco SAE 15W-40	1 gal jug	41gal./yr	Proprietary Blend	Whse. Yrd.	Liquid
Conoco SAE 15W-40	5 gal pail	12-5gal./yr.	Proprietary Blend	Whse. Yrd.	Liquid
Conoco SAE 15W-40	1-55 gal drum	2drm./yr	Proprietary Blend	Whse. Yrd.	Liquid
Dow CA-2102	4 -550 gal tote	1/2gal./day	Proprietary Blend	SRU Blding.	Liquid
Zep	1 - 550 gal tote	2gal./day	Ethanol, Surfactants	SRU Blding.	Liquid
Dow IC-110	2,500 gal tank	17.8gal./day	Aminocaboxylato Iron	SRU Blding.	Liquid
Dow IC-210	2,500 gal tank	95gal./day	Aminocarboylate Sodium Salt I	SRU Blding.	Liquid
Du Pont Antioxidant #22	3 - 55 gal drums	3drm./yr	N,N-D-SecButyl-P-Phenylenediamine	Whse. Yrd./Proc. Area	Liquid
Du Pont Stadis 425	1 - 300 gal tote	55gal./mon.	Toluene	Proc. Area	Liquid
Ethyl Hitec 3023	10,000 gal tank	30gal./day	Petroleum Distillates	Terminals	Liquid
Nemo 1117	7000 gal tank	27gal./day	Proprietary Blend	Terminals	Liquid
Fire Ext. Foam (ATC/AFFF)	6 - 250 gal. Totes	0	Diethylene Glycol Butyl Ether, Water	Filter Hs.	Liquid
Fire Ext. Foam (ATC/AFFF)	12 - 5 gal Buckets	0	Diethylene Glycol Butyl Ether, Water	FireHs.	Liquid
Fire Ext. Foam (ATC/AFFF)	55 - 5 gal Buckets	0	Diethylene Glycol Butyl Ether, Water	Tank #2	Liquid
Helium	2 - 145 lb cylinders	8/yr	Helium	Lab	Gas
Hydrogen	2 145 lb cylinders	4/yr	Hydrogen	Lab	Gas
Hydrogen Peroxide	2-500 lb drums	30drm./yr	Hydrogen peroxide, water	Whse. Yrd.	Gas
Ice Melt	10 - 20 lb bags	10bgs/yr	Potasium Chloride, Sodium Chloride	Whse. Yrd./Proc. Area	Solid
Infineum F7589	500 gal tank	2gal./mon	Naphthalene	Terminals	Liquid
Isopropyl	4 - 5 gal pail	15gal./yr	Isopropyl	Lab	Liquid
Ketjenfine	1 - 55 gal drum	0	MO/Ni/Alumina Silica Catalyst	Whse. Yrd.	Solid
Methanol	4 - 55 gal drums	8qrts./day	Methanol	Whse. Yrd./Proc. Area	Liquid

Product	Max. Volume	Daily Usg.	Ingredients	Location	Phys. State
Nalco 23268	2 - 400 gal tote	4.5gal./day	Sodium Tolytriazole	Whse. Yrd./Clg. Twrs	Liquid
Nalco 71D5+	2 - 400 gal tote	2gal./day	Kerosene	Whse. Yrd./Clg. Twrs	Liquid
Nalco 7308	1 - 55 gal drum	Min.as needed	Polyglycol, Ethoxylated Nonyl-phenol	Lab.	Liquid
Nalco 7338	1 - 55 gal drum	3drm./yr	Glutaraldehyde	Whse. Yrd./Lab.	Liquid
Nalco 7348	1 - 55 gal drum	0.75gal./day	Ethoxylated Nonyl-phenol	Whse. Yrd./Lab.	Liquid
Nalco 7356	3 - 200 gal tote	3.7gal./day	Phosphoric acid	Whse. Yrd./Clg. Twrs	Liquid
Nalco Eliminox 02	2 - 400 gal tote	1.2gal./day	Carbohyrazide	Whse. Yrd./Boiler Hs.	Liquid
Nalco NexGuard 22310	2 - 400 gal tote	2.9gal./day	Acrylate Polymer, NaOH, Water	Whse. Yrd./ Boiler Hs.	Liquid
Nalco Tri-act 1804	2 - 400 gal tote	1.75gal./day	Cyclohexylamine, Water	Whse. Yrd./Boiler Hs.	Liquid
Nalcolyte 8157	2 - 250gal tote	2.6gal./day	Aluminum Hydroxy Chloride	Whse. Yrd./Pump Hs.	Liquid
Nitrogen	18 - 165 lb cylinders	320cyl./yr	Nitrogen	Whse. Yrd./Proc. Area	Gas
Octane	2-55 gal drums	1/2 gal./day	PRF Octane Blend	Whse. Yrd.	Liquid
Octel MO-1	2000 gal tank	2gal./day	Propreitary Polymer, Xylene	Terminal	Liquid
Octel Oil Red B liquid dye	540g tank, 250g tote	2.9gal./day	Organic Die in Xylene	Whse. Yrd./Terminal	Liquid
Oxygen	4 - 150 lb cylinders	12cyl./yr	Oxygen	Whse. Yrd./ Weld Sh./Lab	Gas
Pennzoil motor oil	2 - 55 gal drums	100gal./yr	Proprietary Blend	Whse. Yrd.	Liquid
Perchloroethylene	3 - 55 gal drums	3drm./yr	Tetrachloroethylene	Whse. Yrd./Proc. Area	Liquid
Philips Scentinel A	80 gal tank	200gal./yr	Ethyl Mercaptan	Terminal	Liquid
Phillips 80 Octane	2 - 55 gal drums	1drm./yr	Isooctane, N-Heptane	Whse. Yrd./Lab.	Liquid
Phillips Isooctane	2 - 55 gal drums	1/4gal./day	2,2,4-Trimethylpentane	Whse. Yrd./Lab.	Liquid
Phillips Toluene	10 gal	50gal./yr	Toluene, Benzene	Lab.	Liquid
Purple K Dry Chem Ext. Agent	5 - 50lb. Buckets	0	Proprietary Blend of Potassium Bicarbonate	Tank #2 & FireHs.	Solid
Safety Kleen 105 Solvent	25 gal	0	Parts Washer Solvent	Whse./Shop	Liquid
Stoddard solvent	3 - 55 gal drums	9drms./yr	Stoddard solvent	Whse. Yrd.	Liquid
Sulfuric acid	2 - 500 gal tanks	4.5	Sulfuric acid	Clg. Twrs	Liquid
SynGear 7032 Oil	2 - 55 gal drums	2drm./yr	Proprietary Blend	Whse. Yrd./Terminals	Liquid

Product	Max. Volume	Daily Usq.	Ingredients	Location	Phys. State
SynGear Barrier Fluid 5	3 - 5 gal tote	3pails/yr	Proprietary Blend	Proc. Area/ Whse. Yrd.	Liquid
Syngear SH 7032	1 - 55 gal drum	1/2drm./yr	Proprietary Blend	Whse. Yrd.	Liquid
Ultimate Degreaser	3 - 55 gal drums	2drm./yr	Trisodium Phosphate, Water	Whse. Yrd./Proc. Area	Liquid
Unichem 7055	521 gal tote	2.5	Polyethylbenzene Residue	Boiler Hs.	Liquid
Unichem 7219	521 gal tote	1.25	Aromatic Solvent	Boiler Hs.	Liquid
Unichem 7376	521 gal tote	3.5	Alkylamines	Boiler Hs.	Liquid
Unichem 7533	3 - 55 gal drums	8.7	Proprietary Blend, silver corrosion inhibitor	Whse. Yrd./Proc. Area	Liquid
Unichem 7543	800 gal	9	Proprietary Blend	Whse. Yrd./Proc. Area	Liquid
Unichem 8091	3000 gal tank	2	Aromatic Solvents	Proc. Area	Liquid
Unocal ATF Dextron R II	6 - 55 gal drums	3drm./yr	Oil Mist	Whse. Yrd./Proc. Area	Liquid
X - Course Salt	16 - 2000 lb sacks	83sax/yr.	Sodium Chloride	Whse. Yrd./Proc. Area	Solid
Xylene	3 - 5 gal pails	2pails/yr	Xylene	Lab	Liquid
Zep + E Chemical	3 - 5 gal pails	2pails/yr	Potassium Dodecylbebenzene Sulfonate	Whse. Yrd./Proc. Area	Liquid
Z-seal	4 - 55gal drum	3drms./yr	Ethalene glycol	Whse. Yrd.	Liquid

Non Impacted Basins or Basins with no Process

The non-impacted basin is characterized below.

Northern Area

Characteristics

The northern area is the area north of the Hammond Ditch and outside of the process area. This area has several facilities that are associated with the Bloomfield refinery that do not discharge stormwater. These facilities include, the bioventing project near the river, the pump house for fresh water, a fresh water storage tank, and several groundwater remediation containment ponds. These areas are either self contained or do not discharge stormwater. Outfall 2 runs along the eastern edge of this area.

Material Found within this Basin

This area has no significant materials found within the basin there is fresh water and some groundwater in ponds.

Stormwater Basins

These Basins have been previously evaluated in this document.

Attachment 4

Sample Analysis from Previous Years

Endangered Species Information

Note: Internal stormwater samples have historically been taken at Bloomfield. Those samples were called outfalls in previous versions of these stormwater plans even if no discharge to Waters of the United States took place. Only samples from Outfalls 5 and 2 should be considered discharges. These points have been renamed Outfalls 1 and 2 respectively. The internal sampling points have been renamed "Sampling Point X." In this case, X denotes the former sample number to preserve continuity.

Outfall 1 (formerly known as Outfall 5) Sampling Analysis

	1/26/06	10/10/05	1/4/05	9/29/04	2/4/04	2/25/03	10/29/02
pH	7.96	8.42	7.8	8.03	7.16	8.3	6.5
Oil and Grease	1.3	<1.0	1.5	<1.0	<5.0	4.7	NA
Biological Oxygen Demand (BOD)	NA	NA	NA	7.3	12.2	8.6	NA
Chemical Oxygen Demand (COD)	NA	NA	NA	28.9	62.8	98	NA
Total Suspended Solids (TSS)	260	190	76	53	220	3100	370
Total Kjeldahl Nitrogen	NA	NA	NA	<1.0	9.2	<1.0	1.1
Nitrate + Nitrite	<0.5	<0.5	0.17	<0.5	0.39	0.67	0.36
Phenols	NA	NA	NA	<1.0	<3.0	<3.0	NA
Ammonia	NA	NA	NA	NA	NA	NA	0.33
Total Phosphorus	0.27	0.3	0.282	0.27	0.25	3.15	0.29
Sulfide as H ₂ S	NA	NA	NA	<1.0	<1.0	2	NA
Total Chromium (Cr)	0.0082	<0.006	0.0083	<0.006	<0.006	0.0069	NA
Benzene	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	0.00057	<0.0005
Ethylbenzene	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylene	<0.001	<0.005	<0.005	<0.005	<0.0005	<0.001	<0.001
MTBE	0.0026	<0.0025	<0.0025	<0.0025	0.0037	NA	<0.0025

NA = Not Analyzed
 All Results are reported in mg/L

Outfall 2 (formerly known as Outfall 2) Sampling Analysis

	10/10/05	1/5/05	9/29/04	2/24/04	2/25/03	10/29/02
pH	7.91	7.88	7.92	7.84	8.54	6.8
Oil and Grease	<1.0	1.8	<1.0	<5.0	1.0	NA
Biological Oxygen Demand (BOD)	NA	NA	7.8	<8.0	<4.0	NA
Chemical Oxygen Demand (COD)	NA	NA	36.1	95	88	NA
Total Suspended Solids (TSS)	1500	390	5500	790	2300	2500
Total Kjeldahl Nitrogen	NA	NA	4.2	2.8	5.6	3.7
Nitrate + Nitrite	8.1	7.8	1.5	5	2.5	1.7
Phenols	NA	NA	<3.0	3.7	<3.0	NA
Ammonia	NA	NA	NA	NA	NA	1.6
Total Phosphorus	1.57	1.19	11.8	3.85	4.18	5.9
Sulfide as H ₂ S	NA	NA	<1.0	<1.0	2	NA
Total Chromium (Cr)	0.012	0.039	0.016	0.09	0.026	NA
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	<0.0005	0.008	<0.0005	<0.0005	<0.0005	0.0006
Ethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
MTBE	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0033

NA = Not Analyzed

All Results are reported in mg/L

Sample Point 1 (formerly known as Outfall 1) Sampling Analysis

	03/22/06	10/10/05	1/4/05	9/29/04	1/15/04	10/2/03
pH	8.06	8.51	7.96	7.83	7.59	7.39
Oil and Grease	<2.0	<1.0	1.70	<1.0	15.0	27
Biological Oxygen Demand (BOD)	NA	NA	NA	<8.0	17.2	21.9
Chemical Oxygen Demand (COD)	NA	NA	NA	26.5	65.1	204
Total Suspended Solids (TSS)	59	130	170	99	250	120
Total Kjeldahl Nitrogen	NA	NA	NA	<1.0	3.1	2.8
Nitrate + Nitrite	NA	NA	0.48	0.85	0.78	NA
Phenols	NA	NA	NA	<0.003	<0.003	NA
Ammonia	NA	NA	NA	NA	NA	NA
Total Phosphorus	2.67	0.38	0.79	0.69	0.99	0.83
Sulfide as H ₂ S	NA	NA	NA	<1.0	<1.0	1.1
Total Chromium (Cr)	<0.006	<0.006	0.021	<0.006	0.021	<0.05
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Ethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0025
MTBE	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0033

NA = Not Analyzed

All Results are reported in mg/L

Sample Point 1 (formerly known as Outfall 1) Sampling Analysis

	02/13/03	10/29/02	9/11/02	4/14/02
pH	8.05	6.8	7.4	7.83
Oil and Grease	6.6	NA	NA	6
Biological Oxygen Demand (BOD)	7.7	NA	NA	8.6
Chemical Oxygen Demand (COD)	39	NA	NA	200
Total Suspended Solids (TSS)	310	140	120	592
Total Kjeldahl Nitrogen	1.7	NA	2.7	1.06
Nitrate + Nitrite	NA	NA	1.2	NA
Phenols	6.1	NA	NA	0.97
Ammonia	NA	NA	0.42	0.16
Total Phosphorus	0.55	NA	0.6	0.6
Sulfide as H ₂ S	<1.0	NA	NA	5.71
Total Chromium (Cr)	0.011	NA	NA	0.03
Benzene	<0.0005	NA	NA	NA
Toluene	<0.0005	NA	NA	NA
Ethylbenzene	<0.0005	NA	NA	NA
Xylene	<0.0005	NA	NA	NA
MTBE	<0.0025	NA	NA	NA

NA = Not Analyzed

All Results are reported in mg/L

Sample Point 3 (formerly known as Outfall 3) Sampling Analysis

	1/26/06	10/10/05	1/4/05	9/29/04	1/20/04	10/2/03	2/13/03
pH	7.96	8.18	8.15	8.27	7.69	7.53	8.06
Oil and Grease	1.3	<1.0	1.60	<1.0	<1.0	2.4	2.9
Biological Oxygen Demand (BOD)	NA	NA	NA	<8.0	6.4	25	14.6
Chemical Oxygen Demand (COD)	NA	NA	NA	16.9	83.6	227	74
Total Suspended Solids (TSS)	260	140	310	510	100	140	450
Total Kjeldahl Nitrogen	NA	NA	NA	<1.0	1.4	3.1	2.8
Nitrate + Nitrite	<0.5	1.6	0.72	0.87	1.5	NA	1.5
Phenols	NA	NA	NA	<3.0	<3.0	NA	0.0097
Ammonia	NA	NA	NA	NA	NA	NA	NA
Total Phosphorus	0.47	0.3	0.64	0.91	0.31	0.51	0.45
Sulfide as H ₂ S	NA	NA	NA	<1.0	<1.0	3.7	<1.0
Total Chromium (Cr)	0.0082	<0.006	0.019	<0.006	0.015	<0.006	0.033
Benzene	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Toluene	<0.001	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	<0.0005
Ethylbenzene	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Xylene	<0.003	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0005
MTBE	0.0026	<0.0025	<0.0025	0.0054	0.004	<0.0025	<0.0025

NA = Not Analyzed

All Results are reported in mg/L

Sample Point 4 (formerly known as Outfall 4) Sampling Analysis

	10/10/05	1/4/05	9/29/04	2/4/04	2/25/03	10/29/02	9/11/02
pH	8.07	7.92	8.16	7.37	9.31	7.7	7.4
Oil and Grease	<1.0	1.1	<1.0	5	1.2	NA	NA
Biological Oxygen Demand (BOD)	NA	NA	<8.0	<16.0	<4.0	NA	NA
Chemical Oxygen Demand (COD)	NA	NA	24.1	119	46	NA	NA
Total Suspended Solids (TSS)	720	130	320	690	1000	2400	33
Total Kjeldahl Nitrogen	NA	NA	<1.0	2.2	<1.0	1.8	1.3
Nitrate + Nitrite	1.8	1.7	<1.0	0.66	1.2	1.3	2.1
Phenols	NA	NA	<3.0	<3.0	<3.0	NA	NA
Ammonia	NA	NA	NA	NA	NA	0.38	0.33
Total Phosphorus	0.75	0.45	1.57	0.88	1.3	0.8	0.21
Sulfide as H ₂ S	NA	NA	<1.0	<1.0	<1.0	NA	NA
Total Chromium (Cr)	<0.006	0.21	<0.006	0.035	<0.006	NA	NA
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.001
Toluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.001
Ethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.001
Xylene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.001
MTBE	<0.0025	<0.0025	<0.0025	<0.0025	NA	NA	NA

NA = Not Analyzed

All Results are reported in mg/L



Endangered Species List

[Back to Start](#)

List of species by county for New Mexico:

Counties Selected: San Juan

Select one or more counties from the following list to view a county list:

- Bernalillo
- Catron
- Chaves
- Cibola
- Colfax

[View County List](#)

San Juan County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Species Group</u>	<u>Listing Status</u>	<u>Species Image</u>	<u>Species Distribution Map</u>	<u>Critical Habitat</u>	<u>More Info</u>
bald eagle	<i>Haliaeetus leucocephalus</i>	Birds	AD, T				P
black-footed ferret	<i>Mustela nigripes</i>	Mammals	E, EXPN				P
Colorado pikeminnow (=squawfish)	<i>Ptychocheilus lucius</i>	Fishes	E, EXPN				P
Knowlton cactus	<i>Pediocactus knowltonii</i>	Flowering Plants	E				P
Mancos milk-vetch	<i>Astragalus humillimus</i>	Flowering Plants	E				P
Mesa Verde cactus	<i>Sclerocactus mesae-verdae</i>	Flowering Plants	T				P
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Birds	T				P
razorback sucker	<i>Xyrauchen texanus</i>	Fishes	E			Final	P
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Birds	E				P
yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Birds	C				P

bald eagle

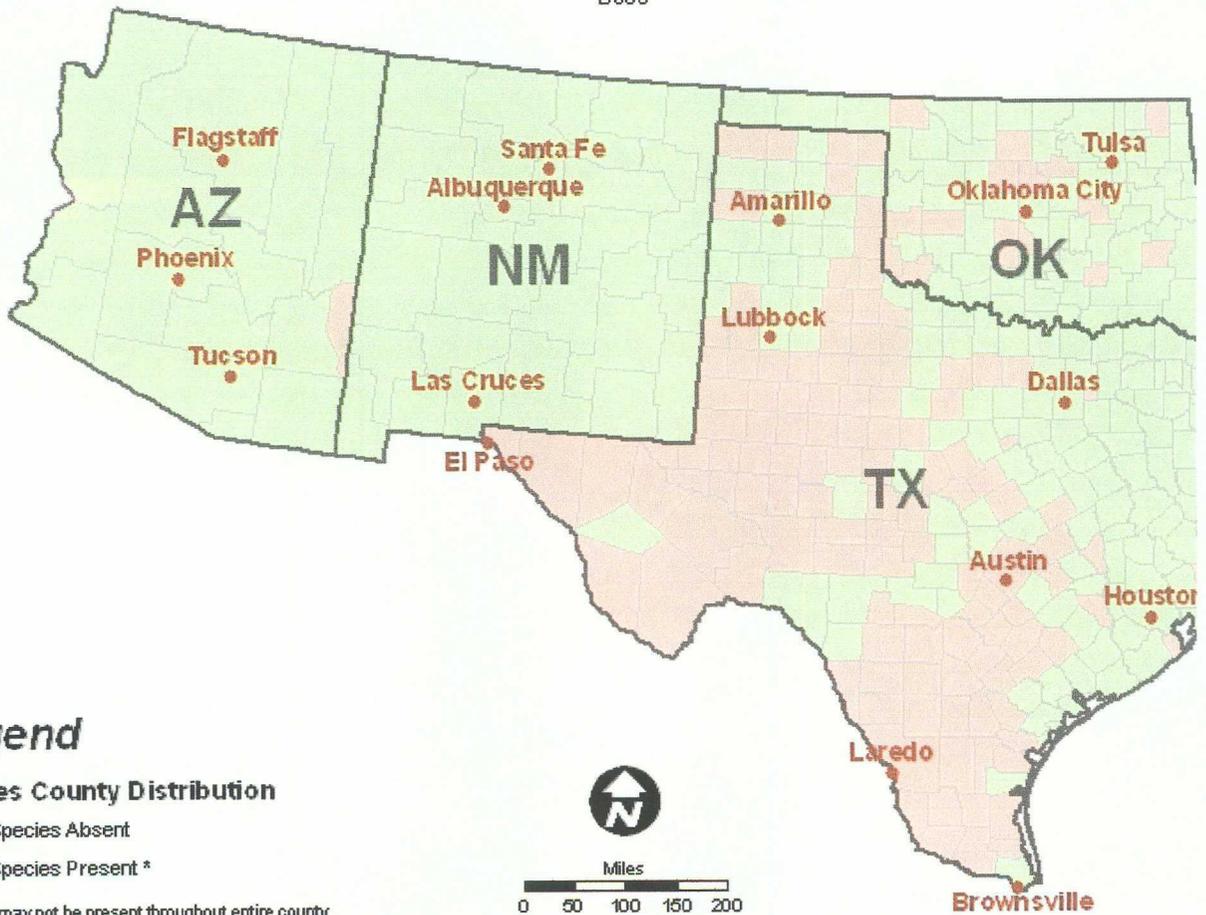
Scientific Name: *Haliaeetus leucocephalus*

County Distribution Map

bald eagle

Haliaeetus leucocephalus

B008



Colorado pikeminnow (=squawfish)

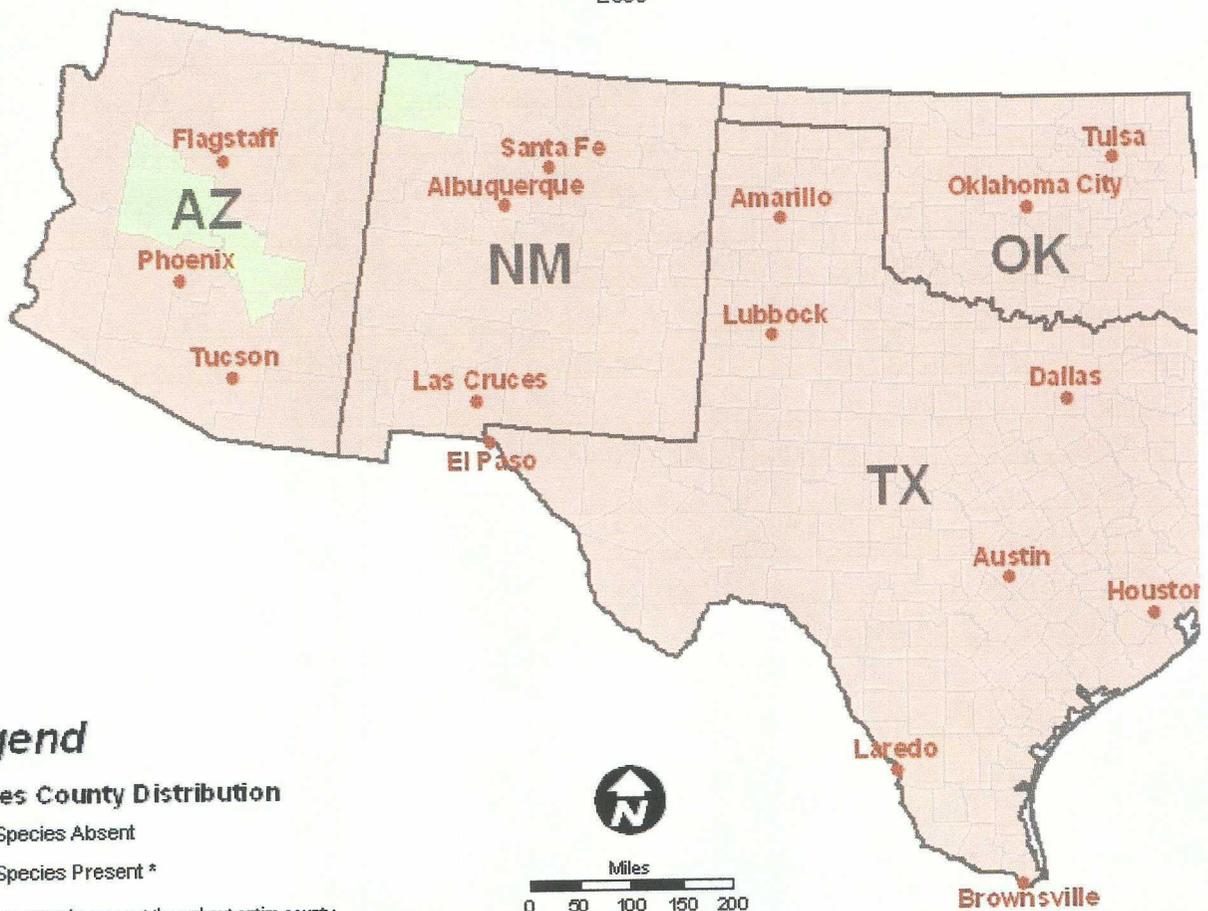
Scientific Name: *Ptychocheilus lucius*

County Distribution Map

Colorado pikeminnow (=squawfish)

Ptychocheilus lucius

E006

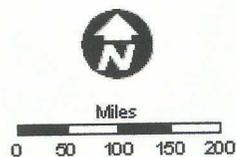


Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county



Knowlton cactus

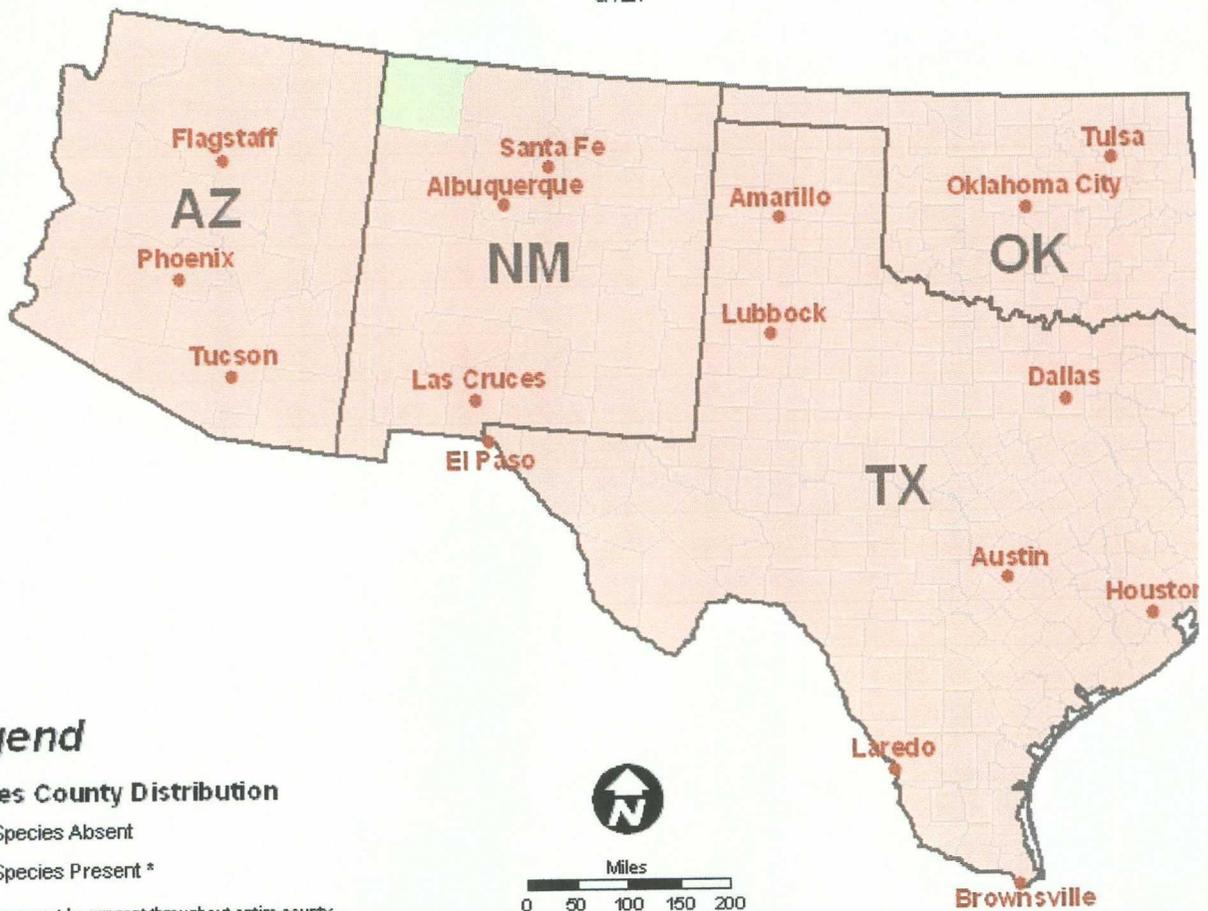
Scientific Name: *Pediocactus knowltonii*

County Distribution Map

Knowlton cactus

Pediocactus knowltonii

Q1ZY



Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county

Mancos milk-vetch

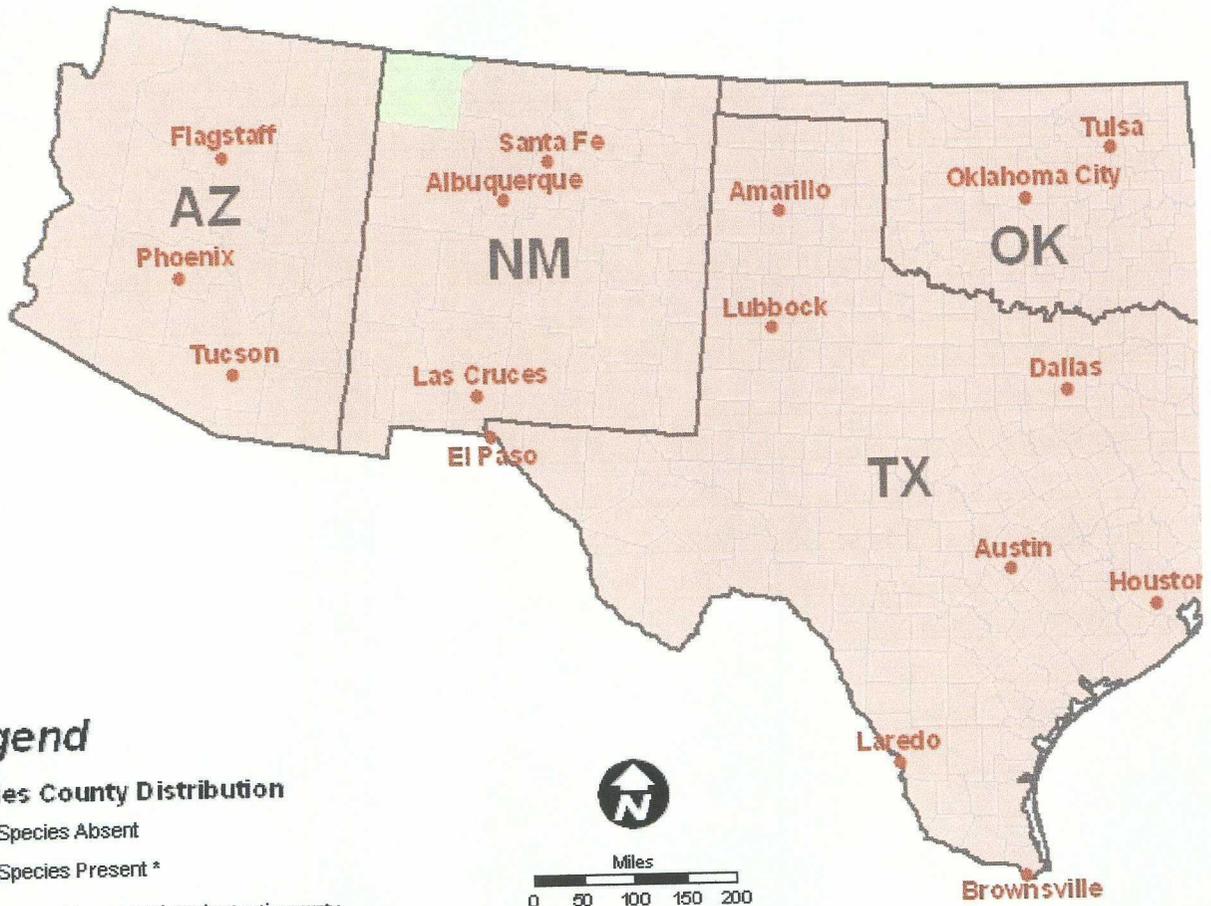
Scientific Name: *Astragalus humillimus*

County Distribution Map

Mancos milk-vetch

Astragalus humillimus

Q1T9



Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county

Mesa Verde cactus

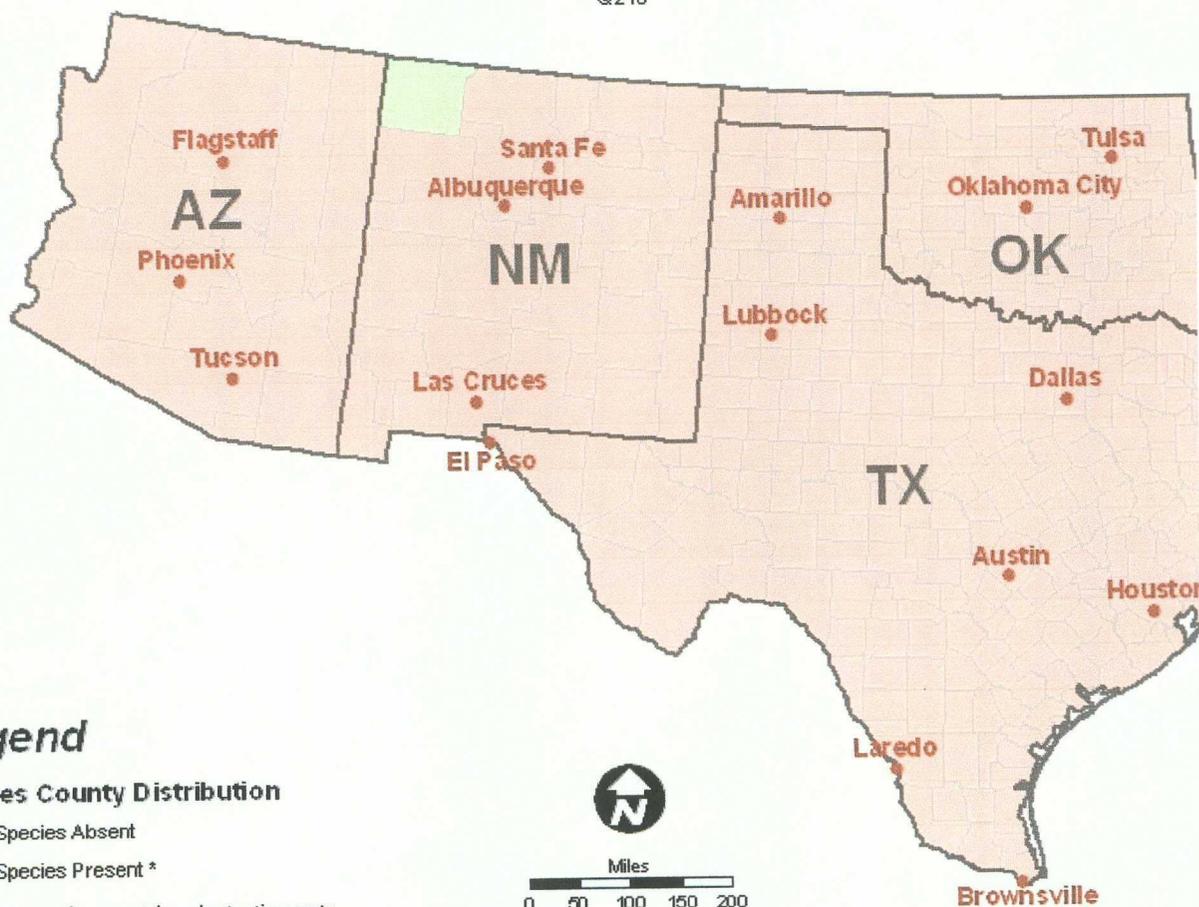
Scientific Name: *Sclerocactus mesae-verdae*

County Distribution Map

Mesa Verde cactus

Sclerocactus mesae-verdae

Q21J



Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county

Mexican spotted owl

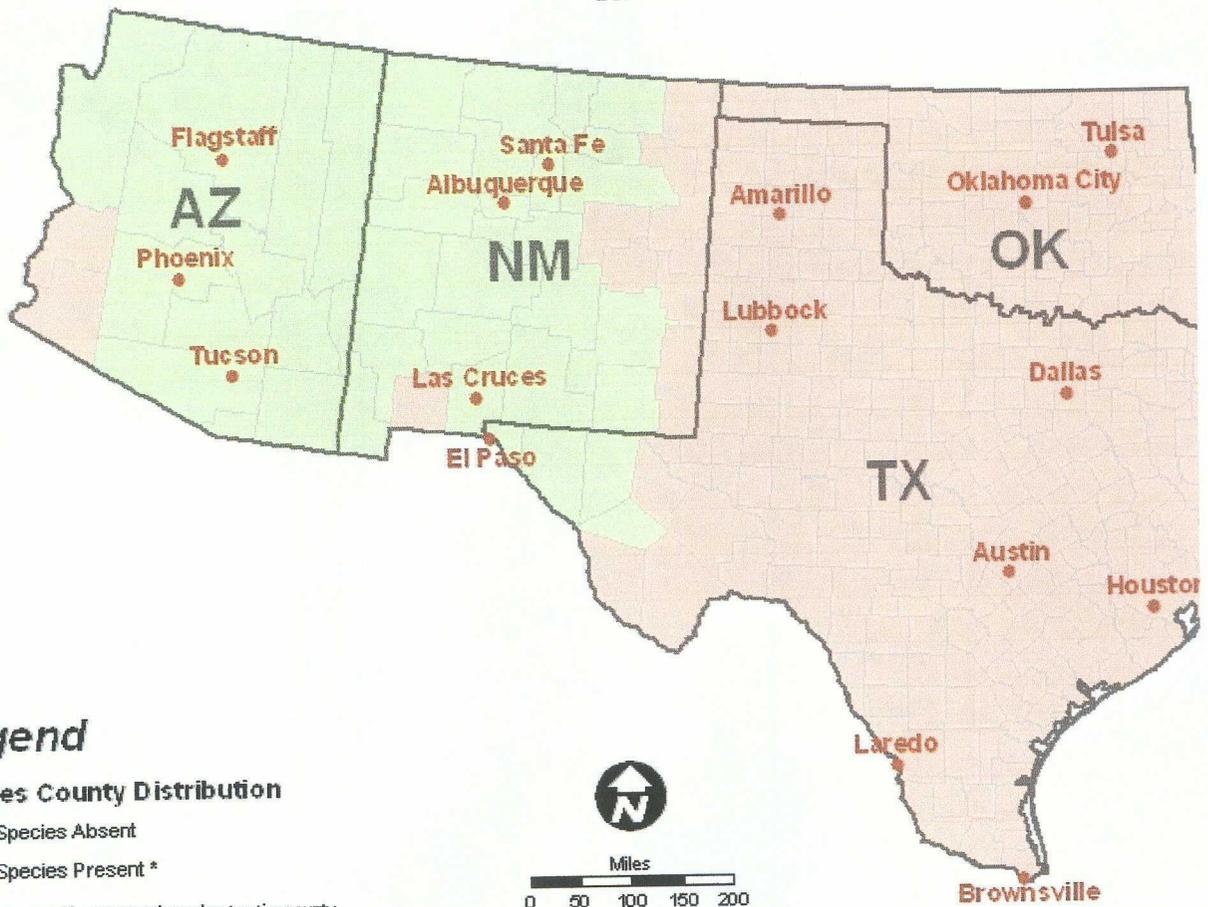
Scientific Name: *Strix occidentalis lucida*

County Distribution Map

Mexican spotted owl

Strix occidentalis lucida

B074



razorback sucker

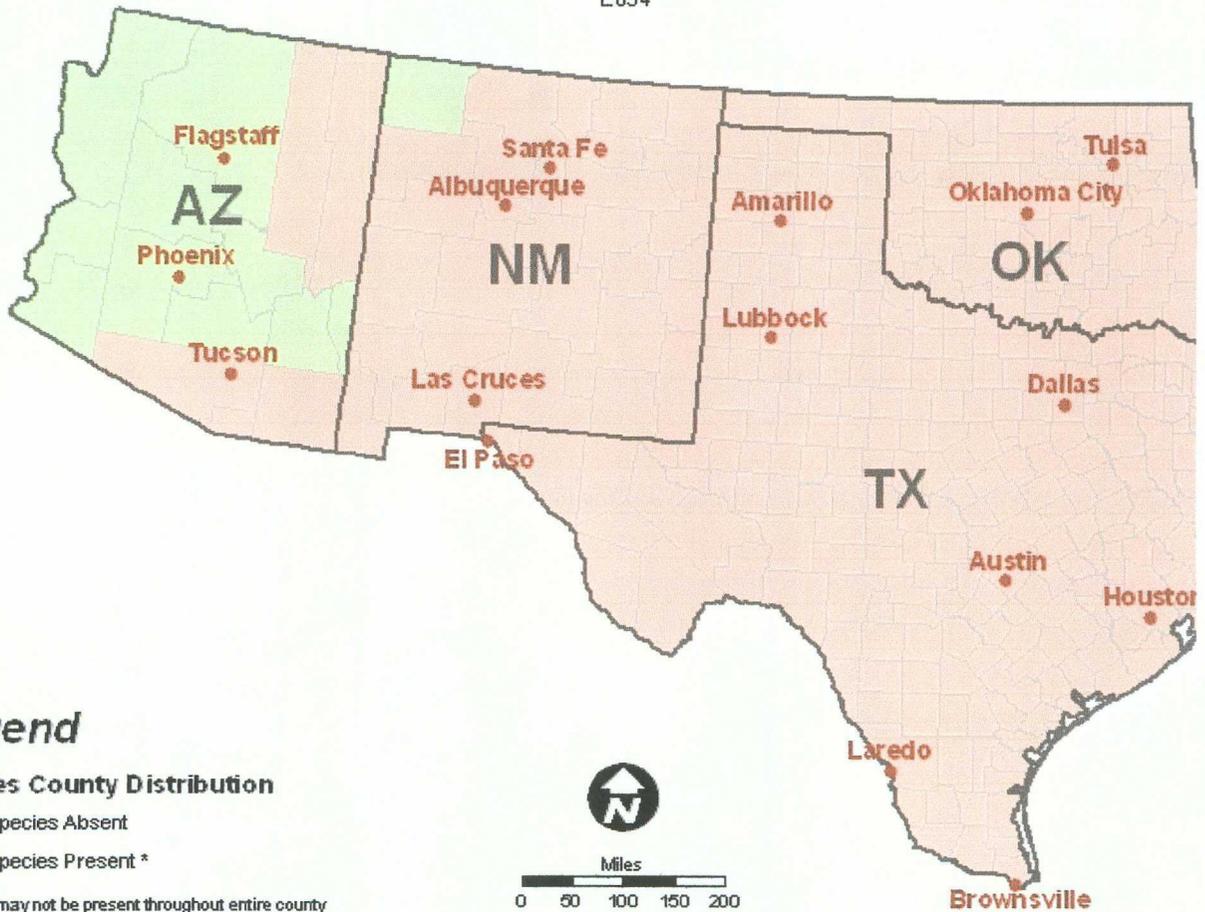
Scientific Name: *Xyrauchen texanus*

County Distribution Map

razorback sucker

Xyrauchen texanus

E054



Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county

southwestern willow flycatcher

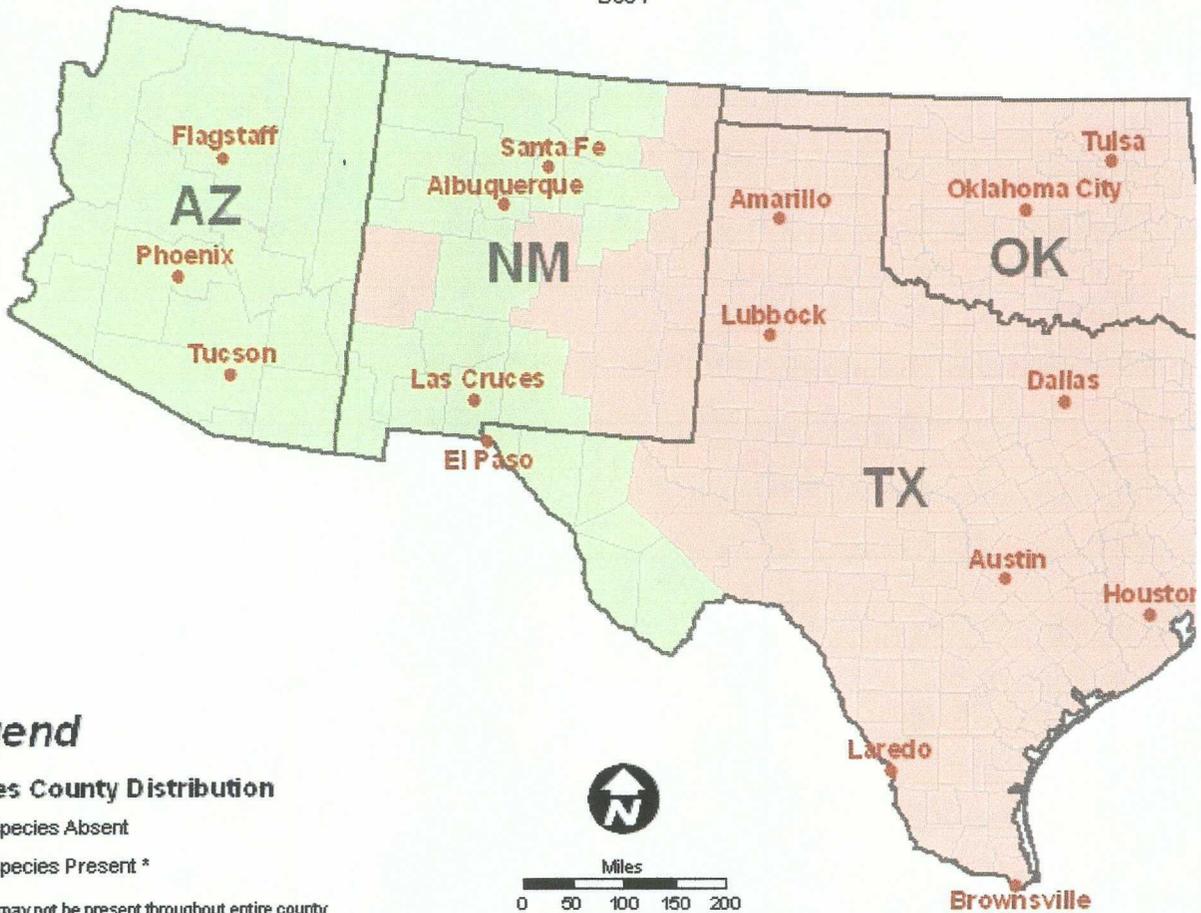
Scientific Name: *Empidonax traillii extimus*

County Distribution Map

southwestern willow flycatcher

Empidonax traillii extimus

B094

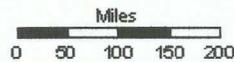


Legend

Species County Distribution

- Species Absent
- Species Present *

* Species may not be present throughout entire county



yellow-billed Cuckoo

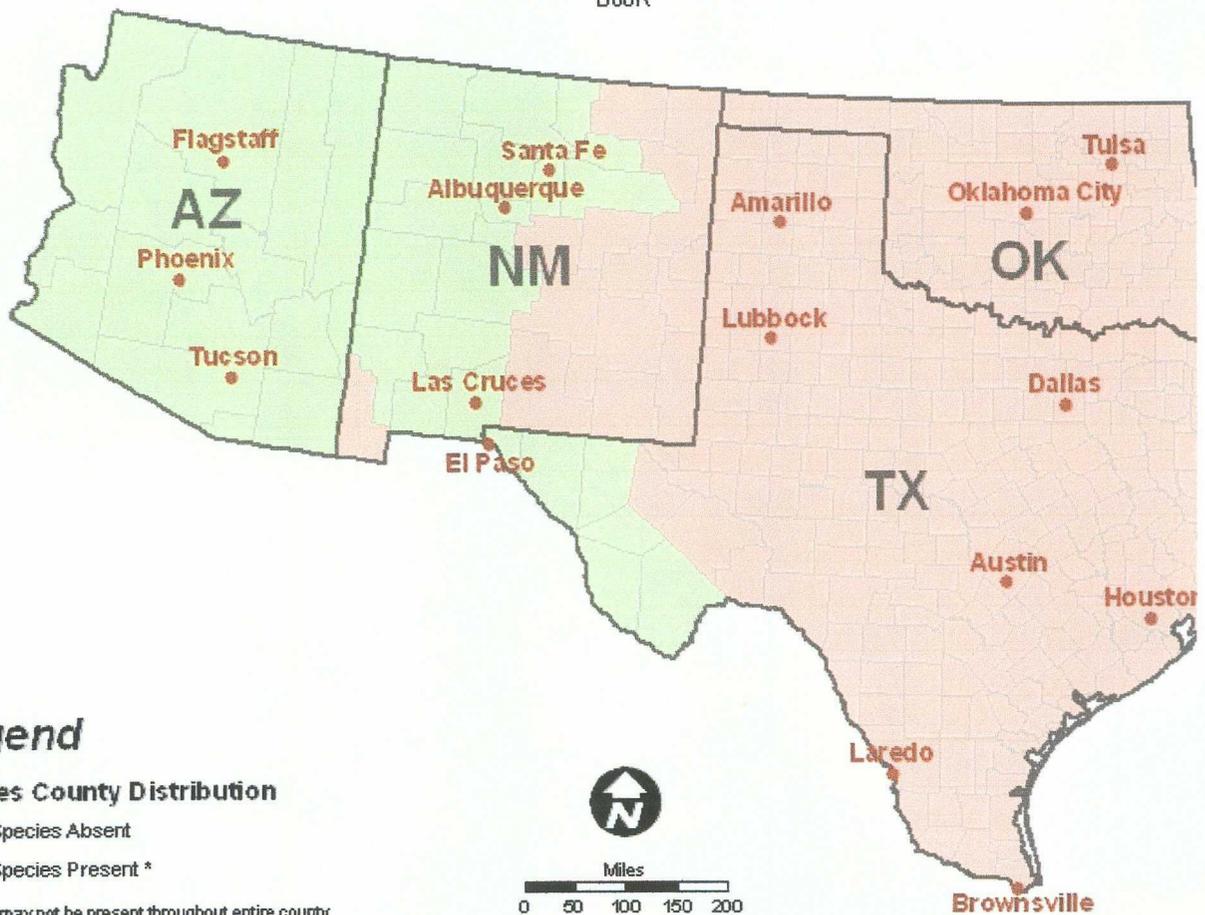
Scientific Name: *Coccyzus americanus*

County Distribution Map

yellow-billed cuckoo

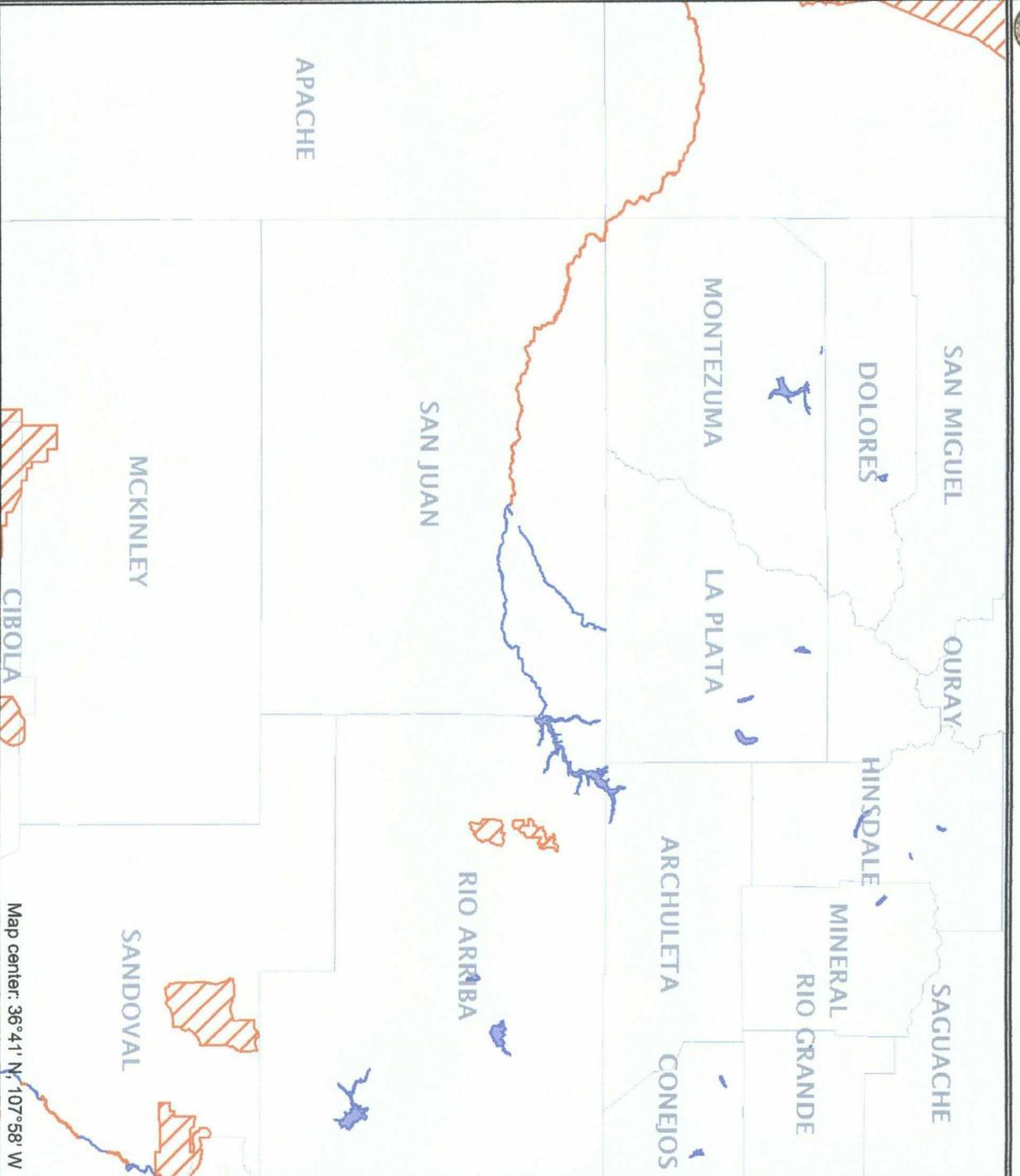
Coccyzus americanus

B06R





Critical Habitat at a 1 to 2.5 million scale

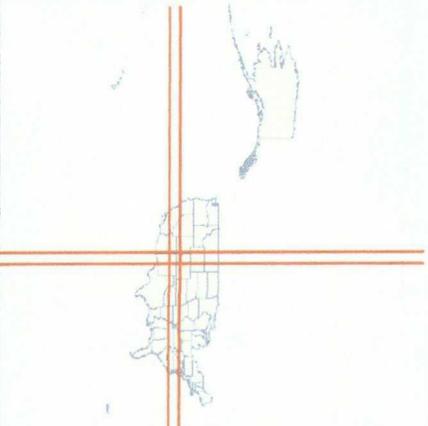


Map center: 36°41' N, 107°58' W

Disclaimer: This map DOES NOT represent all of the critical habitat designated by the U.S Fish & Wildlife Service. It shows only the available digitized critical habitats that have been submitted into this system as of print date.



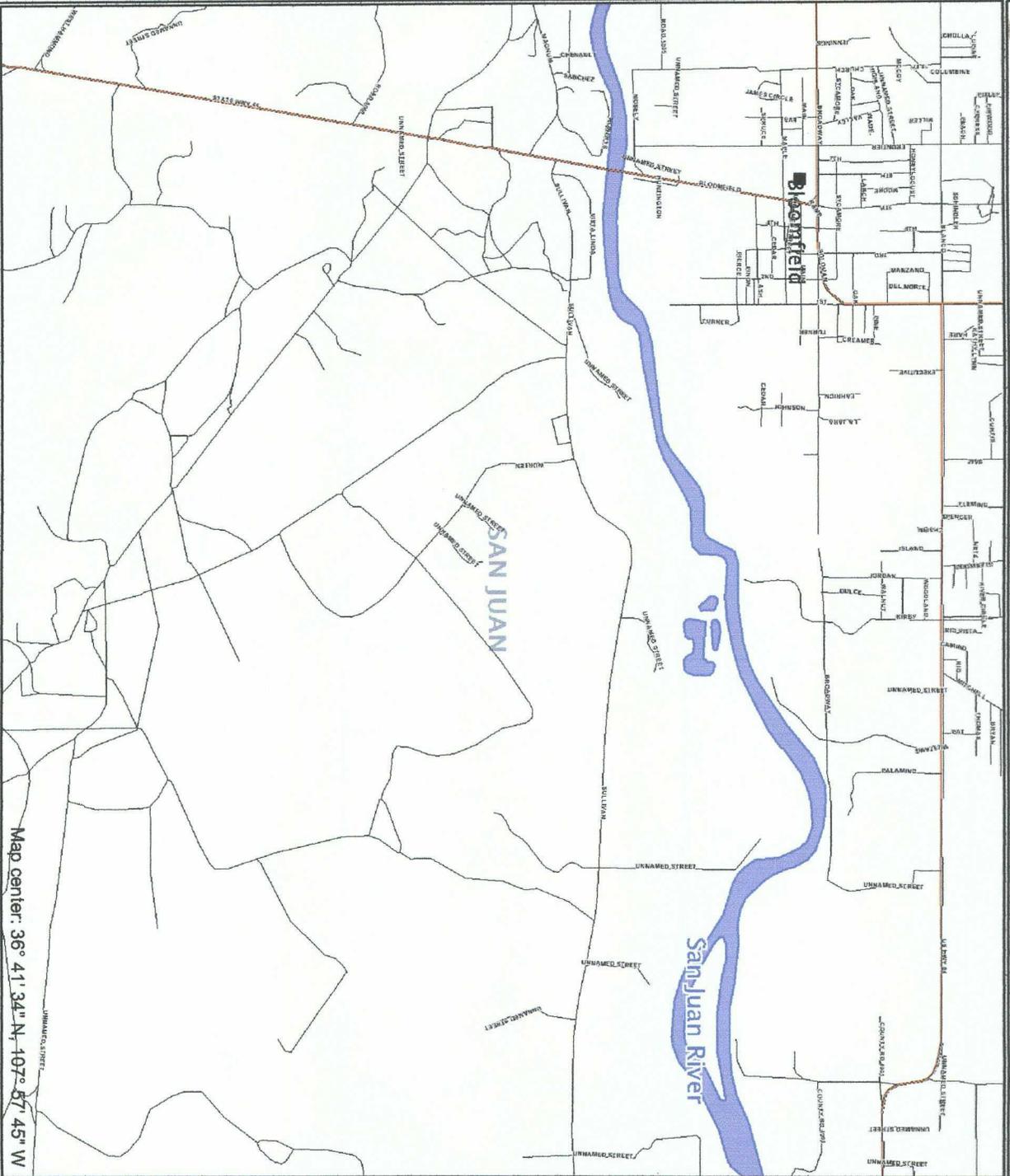
- Critical Habitat
- Cities
 - Cities Greater than 500,000
 - Cities 100,000 to 500,000
- Countries
- U.S. States
- Water Bodies
- Urban Areas



Scale 1:2,500,000
U.S. Fish & Wildlife Service
Printed: Mar 7, 2006 2:51:19 PM



Critical Habitat Map around Bloomfield Refinery 1:50,000 scale

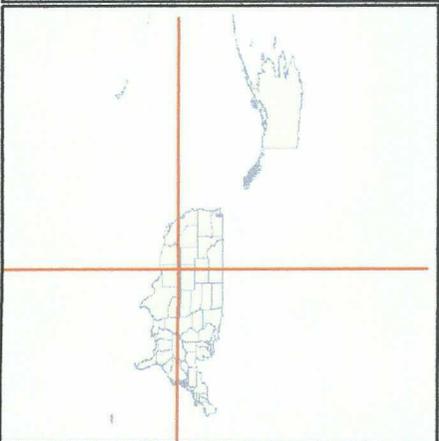


Map center: 36° 41' 34" N, 107° 57' 45" W

Disclaimer: This map DOES NOT represent all of the critical habitat designated by the U.S. Fish & Wildlife Service. It shows only the available digitized critical habitats that have been submitted into this system as of print date.



-  **Critical Habitat**
-  **Cities**
-  **Cities Greater than 500,000**
-  **Cities 100,000 to 500,000**
-  **Towns below 100,000**
-  **Countries**
-  **U.S. States**
-  **Water Bodies**
-  **Urban Areas**



Scale 1:50,000
U.S. Fish & Wildlife Service
Printed: Mar 7, 2006 11:35:20 AM

Attachment 5

Monitoring Forms

BMP Forms

Annual Compliance Form

Task Schedule	Jan 25, 2001 Oct 29, 2001				October 30 2001-2002				October 30 2002-2003				October 30 2003-2004				October 30 2004-2005			
	w m	q	s	a	w m	q	s	a	w m	q	s	a	w m	q	s	a	w m	q	s	a
BMP Inspection	✓				✓				✓				✓				✓			
Visual Monitoring		✓				✓				✓				✓				✓		
Analytical Monitoring ¹																				
Site Compliance Inspection				✓				✓				✓				✓				✓
Training				✓				✓				✓				✓				✓

wm – weekly or monthly (dependent upon location), q - quarterly, s - semiannual, a - annual

Notes:

¹ No analytical monitoring is required in this permit.

Outfalls for Visual Monitoring

1. Outfall 1
2. Outfall 2

Quarterly Visual Monitoring Form

Outfall 1
 Outfall 2

Date

Time:

Name:

Signature:

Observations (60 FR 51161)

Observation

Color

Odor

Clarity

Floating Solids

Settled Solids

Suspended Solids

Foam

Oil Sheen

Other obvious indicators of stormwater pollution

Nature of Discharge (i.e. Runoff, snowmelt)

Probable sources of stormwater contamination

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
 - Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
 - A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.
- Visual Monitoring Waiver**
- If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Received by: _____

Date: _____

**WEEKLY BMP INSPECTION FORM --
Outfall 1**

General Items, Diversion Structures, Sediment Traps

	Date						Weather	Actions to be taken Comments		
	Y/N		Initials		Y/N				Initials	
	Y/N	Initials	Y/N	Initials	Y/N	Initials			Y/N	Initials
Does storm runoff properly drain in the road berms and drainage channels to the stormwater barriers?										
Are the road berms and drainage channels in good condition, clear of debris and functioning properly?										
Is there excessive erosion?										
Are the drop inlets working effectively?										
Do any of these structures require excavation of accumulated sediment or debris?										
Are the rip-rap lined areas in good condition?										
Are surrounding area controls and evaporation pond berms intact?										
Are culverts free-flowing and in good condition?										

Outfall

	Date						Weather	Actions to be taken Comments		
	Y/N		Initials		Y/N				Initials	
	Y/N	Initials	Y/N	Initials	Y/N	Initials			Y/N	Initials
Does stormwater discharge without excessive erosion?										
Is the outfall in good condition?										
Is there debris or sediment present?										

File This Form in the SWPPP File immediately
Retain this record for a period of at least three (3) years after termination of coverage.

Received by: _____

Date: _____

**WEEKLY BMP INSPECTION FORM –
Outfall 2**

General Items, Diversion Structures, Sediment Traps

	Date						Weather	Actions to be taken Comments		
	Y/N		Initials		Y/N				Initials	
	Y/N	Initials	Y/N	Initials	Y/N	Initials			Y/N	Initials
Does storm runoff properly drain in the road berms and drainage channels to the stormwater barriers?										
Are the road berms and drainage channels in good condition, clear of debris and functioning properly?										
Is there excessive erosion?										
Are the stormwater detention ponds effectively removing sediment?										
Do any of these structures require excavation of accumulated sediment?										
Has stormwater discharged from the ponds?										
Are process area controls, rip rap lined pond berms, and other pond berms intact?										
Are groundwater remediation areas in good condition?										
Are culverts free-flowing and in good condition?										

Outfall

	Date						Weather	Actions to be taken Comments		
	Y/N		Initials		Y/N				Initials	
	Y/N	Initials	Y/N	Initials	Y/N	Initials			Y/N	Initials
Does stormwater discharge without excessive erosion?										
Is the outfall in good condition?										
Is there debris or sediment present?										

File This Form in the SWPPP File Immediately
Retain this record for a period of at least three (3) years after termination of coverage.

Received by: _____

Date: _____

**QUARTERLY BMP INSPECTION
FORM GENERAL PLANT AND
PROCESS AREAS**

General Items, Diversion Structures, Sediment Traps										
	Date								Actions to be taken Comments	
	Y / N	Weather	Initials	Y / N	Weather	Initials	Y / N	Weather		Initials
Does storm runoff properly drain to oil-water separator or API units?										
Are the berms around tanks in good condition?										
Are berms or curbs around process areas or loading racks in good condition?										
Is there tracking of materials to roadways or drainage areas?										
Are berms around the facility intact?										
Is there excessive erosion?										
Is the firefighting training area clean?										
Is material stored in assigned location? (warehouse, maintenance yard, etc.)										
Are tanks in good condition?										
Are pipelines in good condition and not leaking?										
Are sumps at loading racks empty?										
Are drop inlets clear and free of debris?										
Is there evidence of non-stormwater discharging to Outfalls 1 or 2?										

File This Form in the SWPPP File Immediately
Retain this record for a period of at least three (3) years after termination of coverage.

ANNUAL SITE COMPLIANCE EVALUATION INSPECTION FORM

Inspector's Name: _____

Date/Time of Inspection: _____

<i>Response Equipment and Plan Review</i>	Yes	No	<i>Actions Taken</i>
Tools and equipment necessary to maintain the BMPs are available?			
Fuel spill supplies (absorbent pads, booms, etc.) are on-site and in good condition?			
Activities, significant materials, non-significant materials, and TRI chemicals located in all basins are consistent with descriptions in Section 3.0 of the SWPPP (i.e., does Section 3.0 match field observations)?			
Pollution prevention systems are adequate to reduce pollutant loading?			
Items as specified in Section 4.13 of the Plan			
1. Industrial materials, residue or trash present			
2. Leaks or spills present			
3. Offsite tracking of industrial material or sediment present			
4. Tracking or blowing of raw, final, or waste materials present			
5. Pollutants entering (or potentially entering) the drainage system			
6. Visual and analytical monitoring taken into account			
7. Evaluation of BMPs and their effectiveness conducted.			

Attach copies of BMP inspection forms to this and additional comments if necessary. If there are NO problems or issues on any of the BMP inspection forms or this form, the facility manager must sign the certification below. If problems or issues are identified on any of the forms, DO NOT SIGN. See Section 5.1.2 Annual Comprehensive Site Compliance Evaluation in the SWPPP for further instructions.

Certification: The Annual Comprehensive Site Compliance Evaluation verifies that the facility is in compliance with the Stormwater Pollution Prevention Plan and the NPDES Multi-Sector General Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Name/Title of Facility Manager

File this Form in the SWPPP File Immediately
Retain this record for a period of at least three (3) years after termination of coverage.

Quarterly Visual Monitoring Form

Outfall 1
 Outfall 2

Date: 5/23/07

Time: 1:30pm

Name: Cindy Hurtado

Signature: *Cindy Hurtado*

Observations (60 FR 51161)	Observation
Color	BROWN
Odor	Ø
Clarity	Murky
Floating Solids	Ø
Settled Solids	Trace
Suspended Solids	Sense
Foam	Ø
Oil Sheen	Ø
Other obvious indicators of stormwater pollution	
Nature of Discharge (i.e. Runoff, snowmelt)	Rain Fall
Probable sources of stormwater contamination	

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form

Outfall 1
 Outfall 2

Date: 5/23/07

Time: 120pm

Name: Cindy Hurtado

Signature: Cindy Hurtado

Observations (60 FR 51161)	Observation
Color	BROWN
Odor	Ø
Clarity	Murky
Floating Solids	Trace
Settled Solids	YES
Suspended Solids	Trace
Foam	Ø
Oil Sheen	Ø
Other obvious indicators of stormwater pollution	
Nature of Discharge (i.e. Runoff, snowmelt)	Rainfall
Probable sources of stormwater contamination	

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form

1st QTR - 2007

Date: 01/31/07

Time: 2:55pm

Outfall 1
 Outfall 2

Name: Cindy Humbdo / Bob Krakow

Signature: Cindy Humbdo

Observations (60 FR 51161)	Observation
Color	Brown
Odor	Ø
Clarity	Murky
Floating Solids	Ø
Settled Solids	Significant Amount
Suspended Solids	Trace
Foam	Ø
Oil Sheen	Ø
Other obvious indicators of stormwater pollution	Ø
Nature of Discharge (i.e. Runoff, snowmelt)	Snow Storm
Probable sources of stormwater contamination	Ø

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form

1st QTR 2007

Date

1/31/07

Time:

2pm

Outfall 1
 Outfall 2

Name: Cindy Hurtado / Bob Krakow

Signature: Cindy Hurtado

Outfall #1 = formerly Outfall #5

Observations (60 FR 51161)

Observation

Color

BROWN

Odor

NONE

Clarity

MURKY

Floating Solids

NONE

Settled Solids

TRACE

Suspended Solids

YES

Foam

~~NO~~

Oil Sheen

~~NO~~

Other obvious indicators of stormwater pollution

~~NO~~

Nature of Discharge (i.e. Runoff, snowmelt)

Snow Storm

Probable sources of stormwater contamination

~~NO~~

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form 4th QTR - 2006

Outfall 1
 Outfall 2

Date: December 27, 2006

Time: 1 pm

Name: Cindy Hurtado

Signature: *Cindy Hurtado*

Observations (60 FR 51161)	Observation
Color	
Odor	
Clarity	
Floating Solids	
Settled Solids	
Suspended Solids	
Foam	
Oil Sheen	
Other obvious indicators of stormwater pollution	
Nature of Discharge (i.e. Runoff, snowmelt)	
Probable sources of stormwater contamination	

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver
 If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

*No visual monitoring in 4th QTR 2006. hours.
 Rain/Snow events occurred during non-working hours.*

Quarterly Visual Monitoring Form

Outfall 1
 Outfall 2

Date: 9-15-06

Time: 8:40 AM

Name:

Signature: *Cindy Hultade*

formerly Outfall #5

Observations (60 FR 51161)

Observation

Color	<i>Brown</i>
Odor	<i>0</i>
Clarity	<i>MURKY</i>
Floating Solids	<i>0</i>
Settled Solids	<i>TRACE</i>
Suspended Solids	<i>SOME</i>
Foam	<i>0</i>
Oil Sheen	<i>0</i>
Other obvious indicators of stormwater pollution	
Nature of Discharge (i.e. Runoff, snowmelt)	<i>Rainfall Runoff</i>
Probable sources of stormwater contamination	

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
 - Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
 - A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.
- Visual Monitoring Waiver**
 If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form

Outfall 1
 Outfall 2

Date: 9-15-06

Time: 8:50 AM

Name:

Signature: *Cindy Huntabo*

formerly Outfall #2

Observations (60.FR 51161)	Observation
Color	Brown
Odor	slight
Clarity	Mucky
Floating Solids	Ø
Settled Solids	Trace
Suspended Solids	Sony
Foam	Ø
Oil Sheen	Ø
Other obvious indicators of stormwater pollution	
Nature of Discharge (i.e. Runoff, snowmelt)	Rainfall Runoff
Probable sources of stormwater contamination	

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Quarterly Visual Monitoring Form

Date: June 29, 2006

Time: 9 Am

Outfall 1
 Outfall 2

*NOT Enough Precip in 2nd QTR
 To allow these outfalls to flow*

Name:
 Signature: Cindy Hurtado

Observations (60 FR 51161)

Observation

NO Samples

Color

Odor

Clarity

Floating Solids

Settled Solids

Suspended Solids

Foam

Oil Sheen

Other obvious indicators of stormwater pollution

Nature of Discharge (i.e. Runoff, snowmelt)

Probable sources of stormwater contamination

Notes:

- Visual monitoring will be performed in the following periods: October through December, January through March, April through June, and July through September for the life of the permit.
- Visual monitoring must be performed during daylight hours using grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snow melt begins discharging of a "representative storm event"
- A "representative storm event" occurs when at least 0.1 inch of precipitation falls (from a single continuous storm event) and at least 72 hours have elapsed since the previous measurable storm event greater than 0.1 inch.

Visual Monitoring Waiver

If visual monitoring cannot be performed during the required period as a result of adverse weather conditions (including drought) or inaccessibility which make the collection of a sample dangerous or otherwise impractical, document here the reason for not performing the visual monitoring:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 3/31/06
 Sampling Location: outfall #2 & outfall #4

Sample Examination:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Suspended Solids _____
- Settled Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Assessment:

*Not enough precipitation during the first Quarter 2006
 to allow these Outfalls to flow.
 No Samples Taken.*

Actions Taken:

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

3/22/06

Sampling Location:

Outfall #1

Sample Examination:

Color

Brown

Odor

0

Clarity

Murky

Floating Solids

Some

Suspended Solids

Some

Settled Solids

Yes

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Conducted Bi-Annual Sampling

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st QTR 2006

Sampling Date: 4/26/06

Sampling Location: outfall #5

Sample Examination:

Color TAN

Odor Ø

Clarity MURKY

Floating Solids Ø

Suspended Solids SOME

Settled Solids TRACE

Foam Ø

Oil Sheen Ø

Other _____

Assessment:

Snow melt
Took bi-annual samples

Actions Taken:

Quarterly Storm Water Visual Inspection Data Sheet

1st Qtr 2006

Sampling Date:

1/26/06

Sampling Location:

outfall #3

Sample Examination:

Color	<u>BROWN</u>
Odor	<u>0</u>
Clarity	<u>MURKY</u>
Floating Solids	<u>0</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>TRACE</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment:

SNOW Melt
Took bi-annual samples

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet *4th QTR 2005*

Sampling Date: 10/10/05

Sampling Location: Outfall # 1

Sample Examination:

Color	<u>TAN</u>
Odor	<u>Ø</u>
Clarity	<u>Murky</u>
Floating Solids	<u>Ø</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>SOME</u>
Foam	<u>Ø</u>
Oil Sheen	<u>Ø</u>
Other	<u></u>

Assessment:

Actions Taken:

SAMPLED FOR ANALYSIS

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 4th QTR 2005

Sampling Date: 10/10/05

Sampling Location: Outfall #3

Sample Examination:

Color Light Brown

Odor Ø

Clarity MURKY

Floating Solids Ø

Suspended Solids SOME

Settled Solids SOME

Foam Ø

Oil Sheen Ø

Other _____

Assessment:

Actions Taken:
Sampled for analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet *4th QTR 2005*

Sampling Date: 10/10/03

Sampling Location: outfall #5

Sample Examination:

Color	<u>TAN</u>
Odor	<u>Ø</u>
Clarity	<u>Murky</u>
Floating Solids	<u>Ø</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>SOME</u>
Foam	<u>Ø</u>
Oil Sheen	<u>Ø</u>
Other	<u> </u>

Assessment:

Actions Taken:

Sampled for Analysis

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd QTR 2005

Sampling Date:

9/08/05

Sampling Location:

outfall #1

Sample Examination:

Color:

Light Brown

Odor:

NONE

Clarity:

murky

Floating Solids:

NONE

Suspended Solids:

SOME

Settled Solids:

TRACE

Foam:

0

Oil Sheen:

0

Other:

Assessment:

sampled for lab analysis

Actions Taken:

UPS failed to deliver samples
No analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd QTR-2005

Sampling Date:

9/08/05

Sampling Location:

Outfall #2

Sample Examination:

Color

clear

Odor

NONE

Clarity

clear

Floating Solids

TRACE

Suspended Solids

0

Settled Solids

significant

Foam

0

Oil Sheen

0

Other

Assessment:

sampled for lab analysis

Actions Taken:

ups failed to deliver samples
No Analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 3rd QTR-2005

Sampling Date: 9/08/05

Sampling Location: outfall # 3

Sample Examination:

Color	<u>Murky - Light Brown</u>
Odor	<u>NONE</u>
Clarity	<u>murky</u>
Floating Solids	<u>0</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>SOME</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment: sampled for lab ANALYSIS

Actions Taken: ups failed to deliver samples
No Analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 3rd QTR - 2005

Sampling Date: 9/08/05

Sampling Location: Outfall #4

Sample Examination:

Color light BROWN

Odor NONE

Clarity Murky

Floating Solids Trace

Suspended Solids SOME

Settled Solids significant

Foam 0

Oil Sheen 0

Other _____

Assessment: sampled for lab ANALYSIS

Actions Taken: UPS failed to deliver samples
No Analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 3rd QTR-2005

Sampling Date: 9/08/05

Sampling Location: Outfall #5

Sample Examination:

Color light BROWN

Odor NONE

Clarity MURKY

Floating Solids Trace

Suspended Solids SOME

Settled Solids Trace

Foam Ø

Oil Sheen Ø

Other _____

Assessment: Sampled for lab analysis

Actions Taken: UPS failed to deliver samples
No Analysis

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

2nd QTR

Sampling Date: JUNE - 2005

Sampling Location: _____

Sample Examination:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Suspended Solids _____
- Settled Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Assessment: *Not enough precipitation to cause outfalls to flow - UNABLE to sample*

Actions Taken:

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st QTR
2005

Sampling Date:

0/05/05

Sampling Location:

Out fall # 2

Sample Examination:

Color

Light Brown

Odor

0

Clarity

murky

Floating Solids

some organic matter

Suspended Solids

yes

Settled Solids

yes

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st Quarter
2005

Sampling Date:

01/04/05

Sampling Location:

#1

Sample Examination:

Color

BROWN

Odor

Ø

Clarity

MURKY

Floating Solids

Ø

Suspended Solids

yes

Settled Solids

SOME

Foam

Ø

Oil Sheen

Ø

Other

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st Quarter
2005

Sampling Date:

01/04/05

Sampling Location:

#4

Sample Examination:

Color	<u>Light brown</u>
Odor	<u>Ø</u>
Clarity	<u>murky</u>
Floating Solids	<u>Ø</u>
Suspended Solids	<u>Some</u>
Settled Solids	<u>yes</u>
Foam	<u>Ø</u>
Oil Sheen	<u>Ø</u>
Other	<u></u>

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

4th QTR
2004

Sampling Date:

12/16/04

Sampling Location:

O/F #5

Sample Examination:

Color

Brown

Odor

NONE

Clarity

murky

Floating Solids

twigs

Suspended Solids

SOME

Settled Solids

SOME

Foam

0

Oil Sheen

0

Other

Assessment:

snow melt

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 4th QTR 2004

Sampling Date: 10-11-04

Sampling Location: O/F # 1

Sample Examination:

Color	<u>Brown</u>
Odor	<u>0</u>
Clarity	<u>MURKY</u>
Floating Solids	<u>0</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>Trace</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment:

The other 3 outfalls did NOT run with this rainfall

Actions Taken:

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet *4th Qtr 2004*

Sampling Date:

10-11-04

Sampling Location:

O/F # 3

Sample Examination:

Color

Brown

Odor

Ø

Clarity

murky

Floating Solids

Ø

Suspended Solids

SOME

Settled Solids

covers the bottom of the jar

Foam

Ø

Oil Sheen

Ø

Other

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd Qtr 2004

Sampling Date:

9-29-04

Sampling Location:

outfall #1

Sample Examination:

Color

Light Brown

Odor

0

Clarity

murky

Floating Solids

0

Suspended Solids

some

Settled Solids

trace

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Conducted Semi-annual sampling

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd QTR 2004

Sampling Date:

9-29-04

Sampling Location:

outfall #2

Sample Examination:

Color	Light Brown
Odor	Ø
Clarity	MURKY
Floating Solids	Ø
Suspended Solids	SOME
Settled Solids	Quite A bit - Covers the bottom
Foam	Ø
Oil Sheen	Ø
Other	

Assessment:

Actions Taken:

Conducted semi-annual sampling

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet 3rd QTR 2004

Sampling Date: 9-29-04

Sampling Location: outfall #3

Sample Examination:

Color Brown

Odor Ø

Clarity Fairly murky

Floating Solids Ø

Suspended Solids SOME

Settled Solids Trace - mostly suspended

Foam Ø

Oil Sheen Ø

Other _____

Assessment:

Actions Taken: Conducted semi-annual sampling

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd QTR 2004

Sampling Date:

9-29-04

Sampling Location:

outfall #4

Sample Examination:

Color

Light Brown

Odor

0

Clarity

murky

Floating Solids

0

Suspended Solids

SOME

Settled Solids

Trace

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Conducted semi-annual sampling

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP, 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd QTR 2004

Sampling Date:

9.29.04

Sampling Location:

Outfall #5

Sample Examination:

Color

~~Light~~ very light Brown

Odor

0

Clarity

Cloudy

Floating Solids

0

Suspended Solids

NOT much

Settled Solids

Trace

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Conducted semi-annual sampling

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

2nd QTR 2004

Sampling Date: *June 30, 2004*
Sampling Location: *ALL 5 outfalls*

Sample Examination:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Suspended Solids _____
- Settled Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Assessment:

Actions Taken:

Not enough precipitation to cause the outfalls to flow during regular working hours

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st Quarter 2004

Sampling Date:

2-24-04

Sampling Location:

Outfall #2

Sample Examination:

Color

BROWN

Odor

0

Clarity

murky

Floating Solids

0

Suspended Solids

Some

Settled Solids

Trace

Foam

0

Oil Sheen

0

Other

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

02-04-04

Sampling Location:

Outfall #5

Sample Examination:

Color

Brown

Odor

0

Clarity

Murky

Floating Solids

0

Suspended Solids

SOME

Settled Solids

Trace

Foam

0

Oil Sheen

0

Other

Assessment:

SNOW melt

Actions Taken:

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

02-04-04

Sampling Location:

Outfall #4

Sample Examination:

Color

Brown

Odor

0

Clarity

Murky

Floating Solids

0

Suspended Solids

Some

Settled Solids

Some

Foam

0

Oil Sheen

0

Other

Assessment:

Snow melt

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st Quarter - 2004

Sampling Date: 01-20-04

Sampling Location: Outfall #3

Sample Examination:

- Color BROWN
- Odor None
- Clarity murky
- Floating Solids 0
- Suspended Solids yes
- Settled Solids yes - small amount
- Foam 0
- Oil Sheen 0
- Other 0

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

1st Quarter 2004

Sampling Date: 01-15-04

Sampling Location: outfall #1

Sample Examination:

Color BROWN

Odor NONE

Clarity MURKY

Floating Solids NONE

Suspended Solids yes

Settled Solids small amount

Foam Ø

Oil Sheen Ø

Other _____

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

4th Qtr 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 12-31-03
 Sampling Location: Outfalls # 2, #4, #5

Sample Examination:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Suspended Solids _____
- Settled Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Assessment:

Actions Taken: *Rainfall did not occur at sufficient amounts to cause these outfalls to flow during regular working hrs.*

Storm Water Pollution Prevention Plan

Revision 1

NPDES Permit No. NMR05B159 (MSGP 2000)

October 2002

Quarterly Storm Water Visual Inspection Data Sheet

~~3~~ 4th Quarter
2003

Sampling Date:

10-02-03

Sampling Location:

outfall # 3

Sample Examination:

Color

Brown

Odor

none

Clarity

murky

Floating Solids

∅

Suspended Solids

yes

Settled Solids

yes

Foam

∅

Oil Sheen

∅

Other

Assessment:

Actions Taken:

Quarterly Storm Water Visual Inspection Data Sheet

4th Quarter
2003

Sampling Date:

10-02-03

Sampling Location:

Outfall #1

Sample Examination:

Color	<u>Brown</u>
Odor	<u>NONE</u>
Clarity	<u>murky</u>
Floating Solids	<u>NONE</u>
Suspended Solids	<u>SOME</u>
Settled Solids	<u>Trace</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

3rd Quarter
2003

Sampling Date: 10-01-03

Sampling Location: _____

Sample Examination:

Color _____

Odor _____

Clarity _____

Floating Solids _____

Suspended Solids _____

Settled Solids _____

Foam _____

Oil Sheen _____

Other _____

Assessment:

Actions Taken:

Significant rainfall did not occur during regular working hrs. Authorized personnel were NOT available to sample other than during regular working hours.

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

2nd Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

7-01-03

Sampling Location:

Sample Examination:

Color

Odor

Clarity

Floating Solids

Suspended Solids

Settled Solids

Foam

Oil Sheen

Other

Assessment: *No significant rainfall occurred during the 2nd Quarter 2003. There ~~were~~ no stormwater events. No samples taken.*

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

1st Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

2-25-03

Sampling Location:

outfall #2

Sample Examination:

Color

Light Brown

Odor

NONE

Clarity

murky - lighter than the others

Floating Solids

~~SOME~~ NONE

Suspended Solids

SOME

Settled Solids

yes

Foam

NONE

Oil Sheen

NONE

Other

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

1st Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 2-25-03

Sampling Location: outfall #5

Sample Examination:

Color	<u>Brown</u>
Odor	<u>NONE</u>
Clarity	<u>Murky</u>
Floating Solids	<u>SOME twigs</u>
Suspended Solids	<u>YES</u>
Settled Solids	<u>trace amount</u>
Foam	<u>NONE</u>
Oil Sheen	<u>NONE</u>
Other	<u></u>

Assessment:
 0.80"
 rain, snow, sleet, hail, & thunder

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

1st Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 2-25-03

Sampling Location: outfall #4

Sample Examination:

Color	<u>Brown</u>
Odor	<u>NONE</u>
Clarity	<u>Murky</u>
Floating Solids	<u>NONE</u>
Suspended Solids	<u>yes</u>
Settled Solids	<u>yes</u>
Foam	<u>NONE</u>
Oil Sheen	<u>NONE</u>
Other	<u></u>

Assessment:

Actions Taken:

1st Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

02-13-03

Sampling Location:

#3 outfall

Sample Examination:

Color	<u>BROWN</u>
Odor	<u>NONE</u>
Clarity	<u>Brown murky</u>
Floating Solids	<u>trace</u>
Suspended Solids	<u>yes</u>
Settled Solids	<u>trace</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment:

0.45" of rainfall (2-14-03) steady, slow, soaking drizzle
 The other 3 outfalls (#2, #4, #5) didn't flow.

Actions Taken:

1st Quarter 2003

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date:

02-13-03

Sampling Location:

#1 outfall

Sample Examination:

Color	<u>Brown</u>
Odor	<u>NONE</u>
Clarity	<u>Brown murky</u>
Floating Solids	<u>0</u>
Suspended Solids	<u>yes</u>
Settled Solids	<u>Trace</u>
Foam	<u>0</u>
Oil Sheen	<u>0</u>
Other	<u></u>

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 10-29-02 4th Quarter 2002

Sampling Location: outfall #1

Sample Examination:

Color - light brown

Odor none

Clarity slightly cloudy

Floating Solids none

Suspended Solids slight

Settled Solids Trace amount

Foam none

Oil Sheen None

Other _____

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 10-29-02 4th Quarter 2002

Sampling Location: outfall # 2

Sample Examination:

Color dark brown

Odor none

Clarity slightly cloudy

Floating Solids none

Suspended Solids medium amount

Settled Solids medium amount - silty

Foam none

Oil Sheen none

Other _____

Assessment:

Actions Taken:

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 10-29-02 *4th Quarter 2002*

Sampling Location: out fall # 3

Sample Examination:

Color - Dark brown

Odor slight hydrocarbon

Clarity very cloudy

Floating Solids none

Suspended Solids heavy

Settled Solids granular - heavy amount

Foam NONE

Oil Sheen none

Other _____

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 10-29-02 ^{4th} Quarter 2002

Sampling Location: outfall #4

Sample Examination:

Color medium brown

Odor none

Clarity cloudy

Floating Solids none

Suspended Solids medium amount

Settled Solids granular - medium amount

Foam none

Oil Sheen none

Other _____

Assessment:

Actions Taken:

Storm Water Pollution Prevention Plan	Revision 1
NPDES Permit No. NMR05B159 (MSGP 2000)	October 2002

Quarterly Storm Water Visual Inspection Data Sheet

Sampling Date: 10-29-02 4th Quarter 2002

Sampling Location: outfall # 5

Sample Examination:

Color light brown

Odor none

Clarity cloudy

Floating Solids none

Suspended Solids slight

Settled Solids slight

Foam none

Oil Sheen none

Other _____

Assessment:

Actions Taken:

Attachment 6

Stormwater Sampling SOP

Public Request Response for SWPPP SOP

Revision Log

ENVIRONMENTAL PROCEDURE
Stormwater Sampling

PURPOSE

The purpose of this document is to describe the proper technique for Storm Water Sampling as it applies to the Giant Industries – Bloomfield Refinery Multi-Sector General Permit (MSGP) Storm Water Pollution Prevention Plan (SWPPP).

SCOPE

To outline the specific requirements for sampling storm water to be in compliance with the MSGP SWPPP at Giant Industries – Bloomfield Refinery.

DEFINITIONS

MSGP means The Multi-Sector General Permit issued for Industrial Activities on October 20, 2000

SWPPP means the Storm Water Pollution Prevention Plan written as required by Giant Industries – Ciniza Refinery to be in compliance with the MSGP

RESPONSIBILITY

The Environmental Department is responsible for the following:

- Ensuring that samples are taken as required.
- Ensuring that anyone assigned to take samples will be familiar with this procedure.

Other Giant Industries – Bloomfield Refinery Departments are responsible for the following:

- Ensuring that, if necessary, their personnel have read and understand the requirements listed in this SOP prior to taking storm water samples.

MATERIALS USED

Gloves, 500 ml bottles, H₂SO₄ ampules (for preserving samples when necessary), chain of custody forms, sampling log, marker, in addition this procedure, the sampling list, the SWPPP sampling requirements section.

SAFETY CONSIDERATIONS

All plant rules will apply and minimum PPE will be required during storm water sampling. Care needs to be taken when opening ampules.

ENVIRONMENTAL CONSIDERATIONS

Sampling is required for coverage under the MSGP so all sampling steps must be followed.

Approved/Recertified E. Riege	Effective 1/30/06	Supersedes N/A	Revision # New	Page 1 of 4
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COST CONSIDERATIONS

Cost considerations will include the cost of improper actions with respect to the environmental and the potential fines, the cost of personnel time in correcting those problems, and the potential cost of an operational shutdown.

REFERENCES

- MSGP
- SWPPP
- Federal Register dated October 30, 2000
- EPA Guidance "NPDES Storm Water Sampling Guidance Document" dated July 1992.

RECORDS/REPORTS

- Copies of the sample analysis, log books, and chains of custody will be kept as required by the SWPPP
- All environmental records will be kept in the Environmental Department Files.
- Reports will be issued as necessary to convey changes in permits or regulations to the appropriate personnel.

PROCEDURE/WORK INSTRUCTION

For visual samples, a grab sample in a plastic 500 ml bottle can be taken and reviewed for the parameters required away from the site. The sampler should grab a representative sample of the discharge from the outfall.

Samples should be identified using the discharge that they are reporting to for clarity and none of the water sampled for storm water should include ponded water. The following steps shall be taken:

- Sample bottles shall be marked with the location, date, time, preservative (if applicable), and sampler initials. Both the lid and the bottle shall be labeled to prevent cross-contamination of the samples once they are at the lab.
- Sampler shall wear latex gloves
- The samples shall be collected in sterile plastic sample bottles that are preferably 500 ml in size.
- While facing upstream, the sample container shall be rinsed 2 to 3 times prior to taking storm water sample.
- Add the proper preservative.
- Place samples on ice.
- Record the sample in the sample log.
- Proceed to the next sample location and repeat steps 1 -7.
- Once all sampling is complete, fill out the chain of custody form for the samples.
- If more than 5 locations are sampled during the same round, a duplicate sample shall be sent to the lab as well as a field blank for QA/QC purposes. If less than 5 locations are sampled, no such QA/QC sample is required.
- Transport samples to the laboratory before the laboratory closes for the day.

Approved/Recertified E. Riege	Effective 1/30/06	Supersedes N/A	Revision # New	Page 2 of 4
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**Environmental Procedure
Stormwater Sampling**

Samples will have inorganic and an organic parameter analytical requirements. The following preservatives and bottle configuration shall be used: 1 bottle preserved with HNO₃, 1 bottle preserved with H₂SO₄, and 1 bottle shall be unpreserved.

Preservatives and bottles required for each storm water sample:
No Preservatives - 1-500 ml HDPE

TSS
Turbidity
*Nitrate-Nitrite**
pH

H₂SO₄ Preservative - 1-500 ml HDPE

COD
*TKN**

**Nitrate-Nitrite Nitrogen needs to be reported to EPA.*

Approved/Recertified E. Riege	Effective 1/30/06	Supersedes N/A	Revision # New	Page 3 of 4
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Revision Log

Revision Number	Date	Name of Person Making Revision	Purpose of Revision
1	3/31/2006	Vector Arizona	Original Version Issued March 31, 2006

**Environmental Procedure
Providing Public Copies of the Stormwater Plan**

**ENVIRONMENTAL PROCEDURE
Providing Public Copies of the Stormwater Plan**

PURPOSE

The purpose of this document is to describe the proper procedure to follow when providing a copy of the Storm Water Pollution Prevention Plan (SWPPP) for Giant Industries – Bloomfield Refinery to the public.

SCOPE

To outline the specific procedures to follow when providing copies of the SWPPP to be in compliance with the MSGP dated October 30, 2000.

DEFINITIONS

MSGP means *The Multi-Sector General Permit issued for Industrial Activities on October 20, 2000*

SWPPP means *the Storm Water Pollution Prevention Plan written as required by Giant Industries – Ciniza Refinery to be in compliance with the MSGP*

RESPONSIBILITY

The Environmental Department is responsible for the following:

- *Ensuring that the copy of the SWPPP provided at the written request of member of the public is the most current version.*

Other Giant Industries – Bloomfield Refinery Departments are responsible for the following:

- *Ensuring that copies are provided to the public within 30 days of their request and that the procedure outlined below is adhered to.*

MATERIALS USED

Original SWPPP or electronic copy, appropriate stamp or watermark on electronic copy, copier or printer

SAFETY CONSIDERATIONS

This is procedural only and has no safety considerations.

ENVIRONMENTAL CONSIDERATIONS

The MSGP requires that copies of the SWPPP be provided to the public upon written request.

COST CONSIDERATIONS

Cost considerations will include the cost of improper actions with respect to the MSGP and the potential fines, and the cost of personnel time in correcting those problems.

Approved/Recertified E. Riege	Effective 1/30/06	Supersedes N/A	Revision # New	Page 1 of 3
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**Environmental Procedure
Providing Public Copies of the Stormwater Plan**

REFERENCES

- MSGP
- SWPPP
- Federal Register dated October 30, 2000

RECORDS/REPORTS

The request letter shall be stamped and a response letter shall be generated, all such records will be kept in the Environmental Department Files.

PROCEDURE/WORK INSTRUCTION

Once a written request for a copy of the SWPPP is received at Bloomfield Refinery, the following steps shall be followed:

- The letter shall be date stamped on the day of receipt,
- The Environmental Engineer shall check the storm water plan to ensure that the most current version is available to be copied or an electronic version is available for printing.
- Within 30 days either
 - Copies of the plan and supporting documents shall be made and each page shall be stamped with “SWPPP Provided in Response to Public Request” to ensure that the pages are generated at Bloomfield Refinery, or
 - The plan shall be reprinted and each page shall be watermarked “SWPPP Provided in Response to Public Request dated xx/xx/xx” to ensure that the pages are generated at Bloomfield Refinery.
- The plan shall then be assembled and mailed to the requestor with a letter that includes the date the request was received.
- The request letter and response letters will then be filed for future reference.

Approved/Recertified E. Riege	Effective 1/30/06	Supersedes N/A	Revision # New	Page 2 of 3
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Attachment 7

Stormwater Facility Upgrades

Storm Water Pollution Prevention Plan	Year - 2006
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Team Meeting Date: **Tuesday, November 28, 2006 (9:30 AM)**

Team Members Present: **Cindy Hurtado (Team Leader)
Randy Schmaltz (Environmental Manager)
Ed Riege (Environmental Superintendent)
Bruce Cauthen (Environmental Coordinator)
Vic McDaniel (Operations Manager)
Jim Stiffler (Safety Manager)
Ron Weaver (Terminals Manager)
Todd Doyle (Refinery Manager)
Don Wimsatt (Maintenance Manager)**

Meeting Minutes:

A meeting of the SWPPP Team was conducted in order to review the current status of the SWPPP and discuss new information, regulations, inspection reports, changes, revisions, and updating of the plan. Key issues and decisions are summarized below.

1. The SWPPP Team Member section will be updated to show the current members and associated responsibilities. Todd Doyle is now the Refinery Manager at Bloomfield Refinery and Bruce Cauthen has been added to the Bloomfield Refinery Environmental Department as an Environmental Coordinator.
2. The Stormwater Pollution Prevention Plan was updated in 2006 by Vector Arizona. New details include endangered species information and an updated stormwater map.
3. The 2006 self-audit inspection report was reviewed and the recommendations were addressed. Some projects were delegated for research of solutions. Documentation for ongoing maintenance and other refinery improvements will be in the form of before and after photographs as well as work order printouts.
4. 2006 training will emphasize Best Management Practices to improve housekeeping efforts. Significance will be placed on proper labeling, handling, and disposal of buckets, barrels, and totes. Diligence to remove rainwater from containments will also be emphasized.

Storm Water Pollution Prevention Plan	Year - 2006
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Reviewed by:

Todd R. Doyle

Name/Title:

Todd Doyle, Refinery Manager

Date:

11/28/06

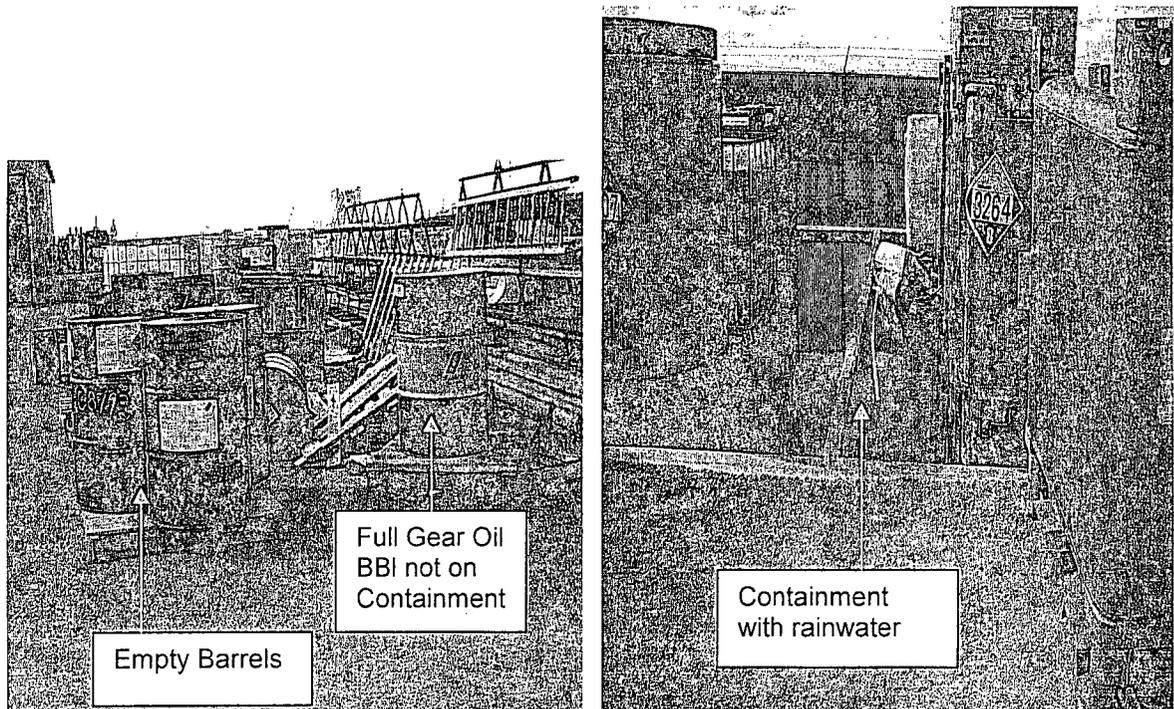
Audit Performed By: **Cindy Hurtado, Environmental Coordinator**

Dates Performed: **Wednesday, November 01, 2006**

Observations & Findings:

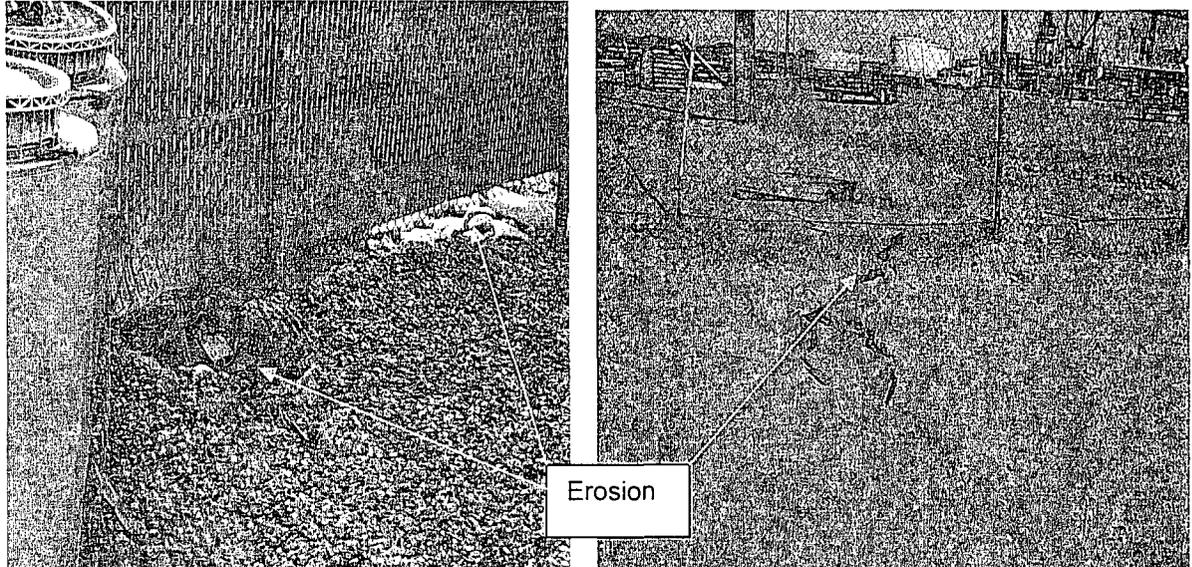
A walking tour and comprehensive visual inspection of the Refinery, Terminal, Transportation Shop, and surrounding vicinity was conducted on Wednesday, November 01, 2006. The weather was clear and mild. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

1. The west storage yard was inspected first. Properly labeled totes and 55 gallon drums containing various petroleum and chemical products were observed within the yard. Most of them were stored properly though a few were not. Empty barrels should be stored in the boneyard with the barrel lying down with the bungs parallel to the ground. The ground surface showed no indication of staining or recent spills. Housekeeping was fair. Containments in the warehouse yard and at the used oil area were holding a substantial amount of rainwater.

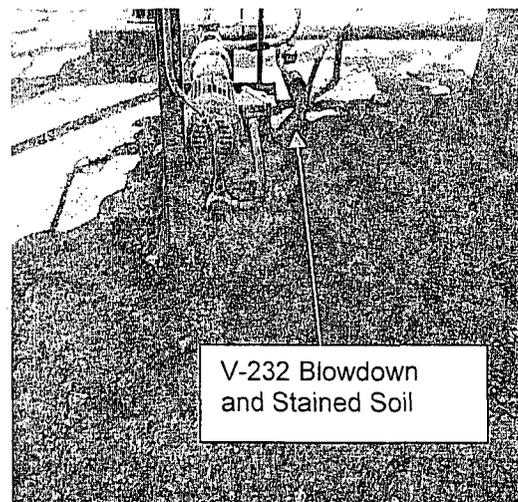
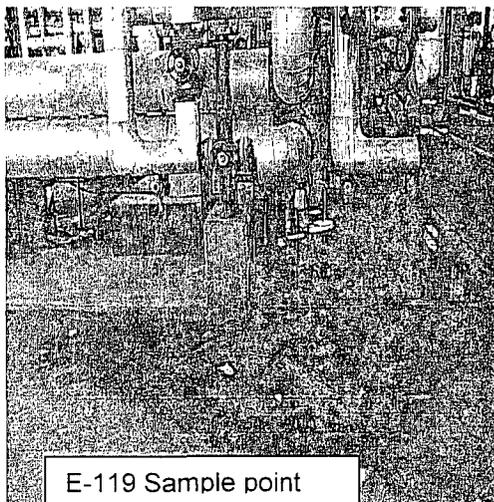


Warehouse Yard

Secondary containment or berming around the warehouse yard showed signs of erosion.



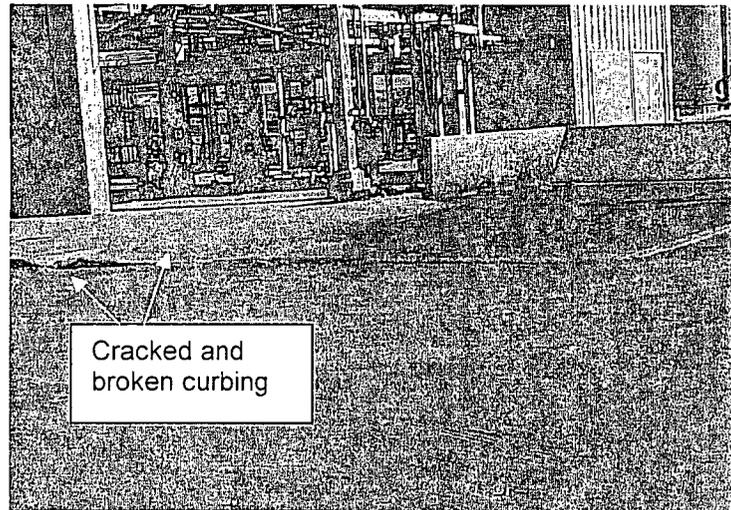
2. The main office, warehouse, and parking areas were visually inspected. Chemical products, outdoor chemical or petroleum storage was observed to be stored properly. The ground surface showed no indication of staining.
3. The process area was visually inspected. In general, housekeeping was observed to be fair. There were areas found with soil staining which indicate carelessness with blowdowns or sample collection.



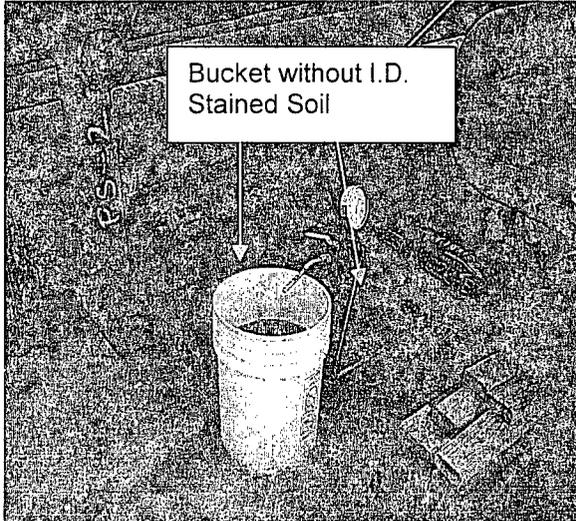
Secondary containment pads were observed to be structurally competent for spill and storm water containment with the exception of the Poly Unit Catalyst Pad.

Storm Water Pollution Prevention Plan	Year - 2006
Annual Self-Audit Inspection Report	

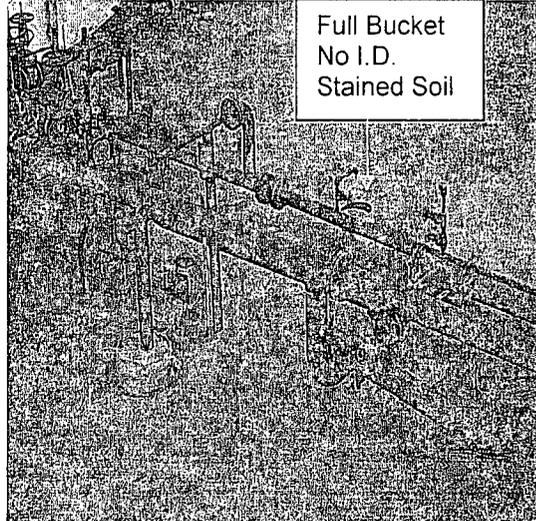
Cracked curbing needs to be repaired and built up to prevent spills and runoff from leaving the containment area.



4. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 20 inches of freeboard space available.
5. The Tank Farm and ancillary tankage areas were visually inspected. Housekeeping was observed to be poor. There were numerous unlabeled buckets throughout the Tank Farm. Some buckets were being used at sample points, yet it appeared that they were not being emptied often enough as indicated by the soil staining around the bucket. Standing rainwater had not been pulled from containments.

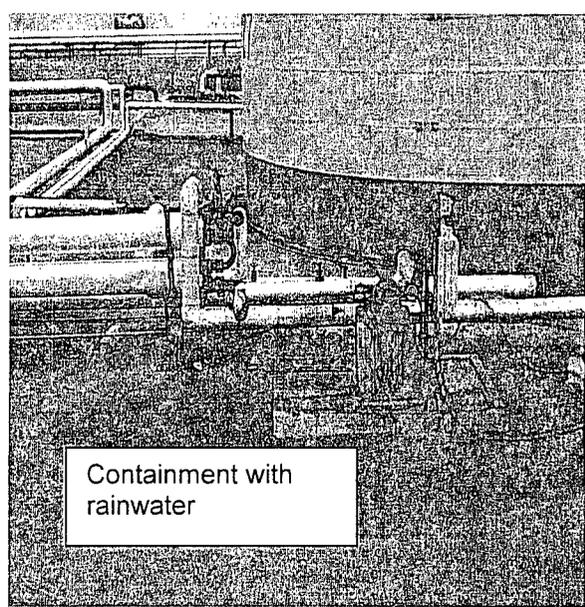


Between the ULSD Tanks



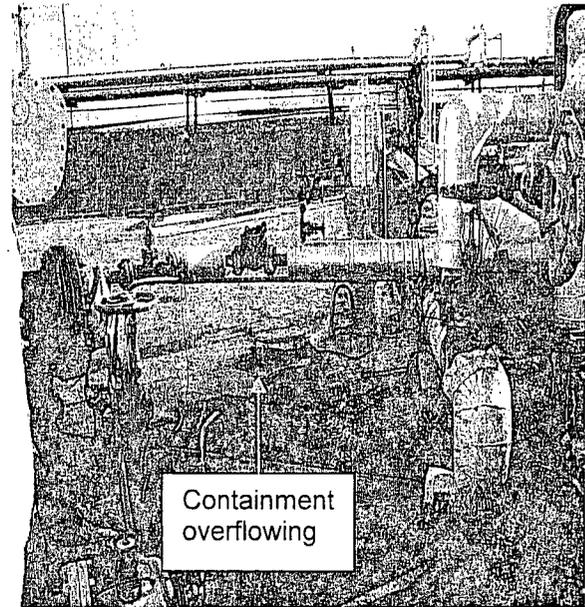
Tank #18

Storm Water Pollution Prevention Plan	Year - 2006
Annual Self-Audit Inspection Report	



Containment with rainwater

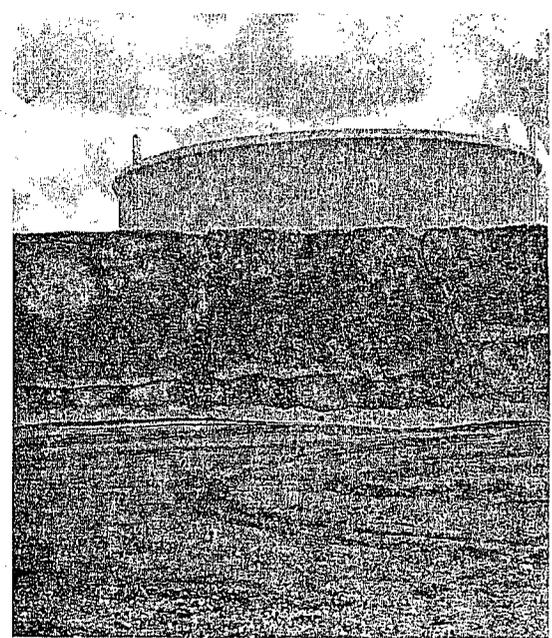
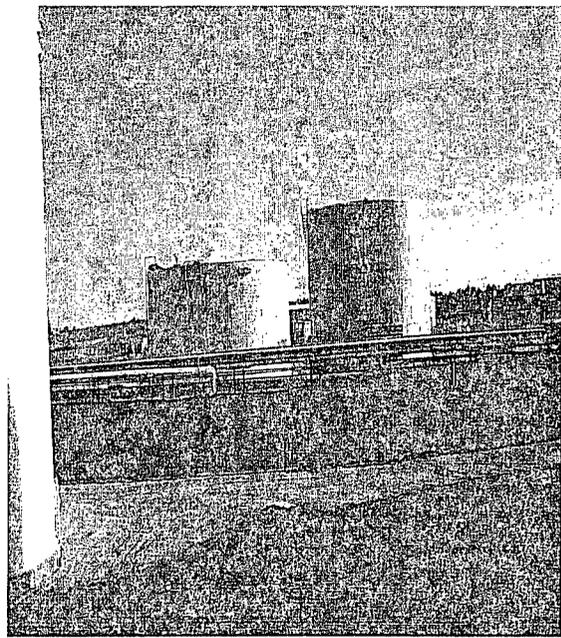
Tank #27



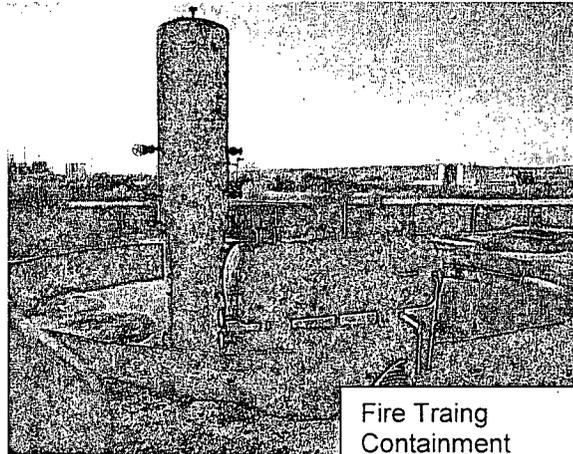
Containment overflowing

Tank #17

Tanks #17 and #27 were degassed, cleaned, and internally inspected in 2006. A new floor was installed on Tank #27. All inspected tanks were found to be in serviceable condition with no evidence of leakage. Most tankage berms are showing signs of erosion.

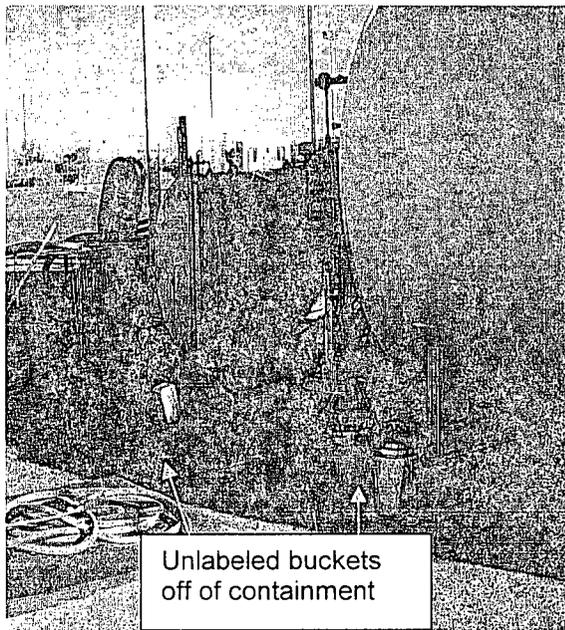


- The Fire Training Area was visually inspected. Berms were observed to be in good condition. Containments were holding rainwater.

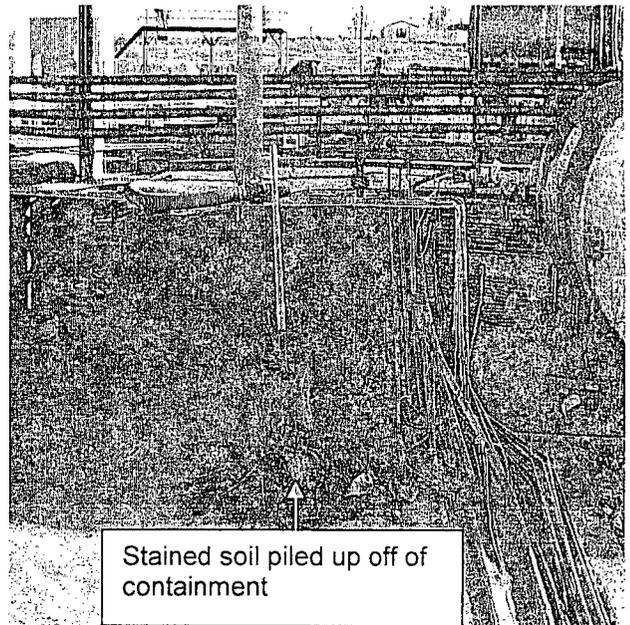


Fire Traing
Containment
holding rainwater

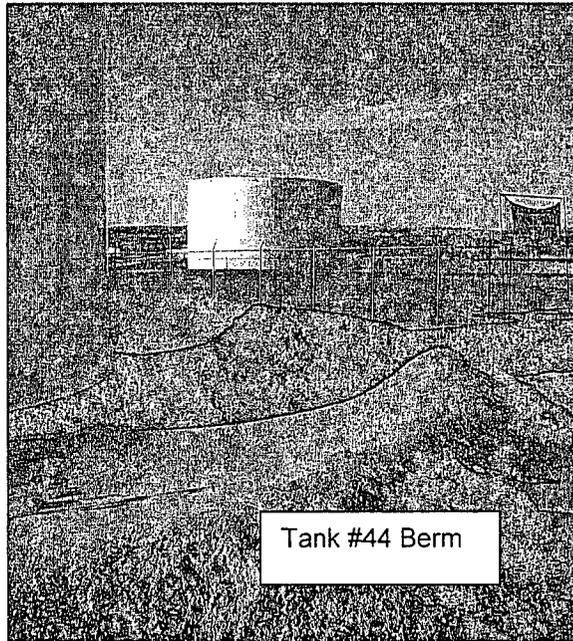
- 7. The Onsite Landfill was visually inspected. The berms on the east and southeast side of the landfill area were in good condition.
- 8. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be adequate. No problem areas were identified.
- 9. The Terminal Area was visually inspected. Housekeeping was observed to be fair. Several unlabeled buckets were off containment and stained soil was piled up off of containment. The berm around Tank #44 has filled in a bit and is weathered.



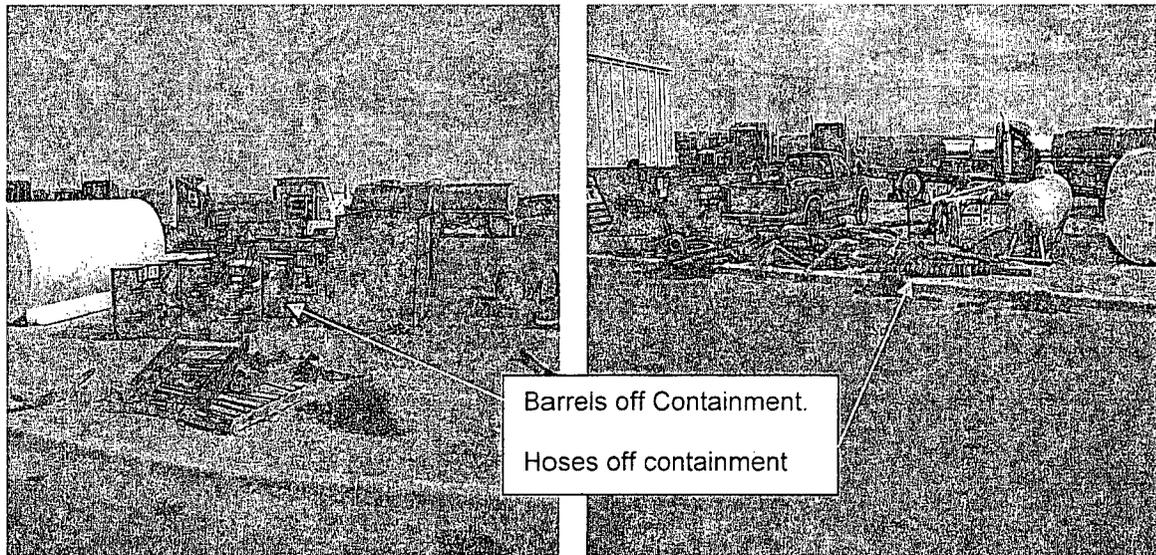
Unlabeled buckets
off of containment



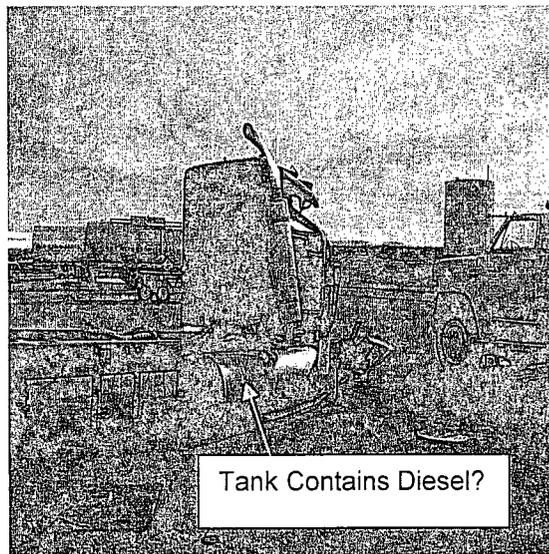
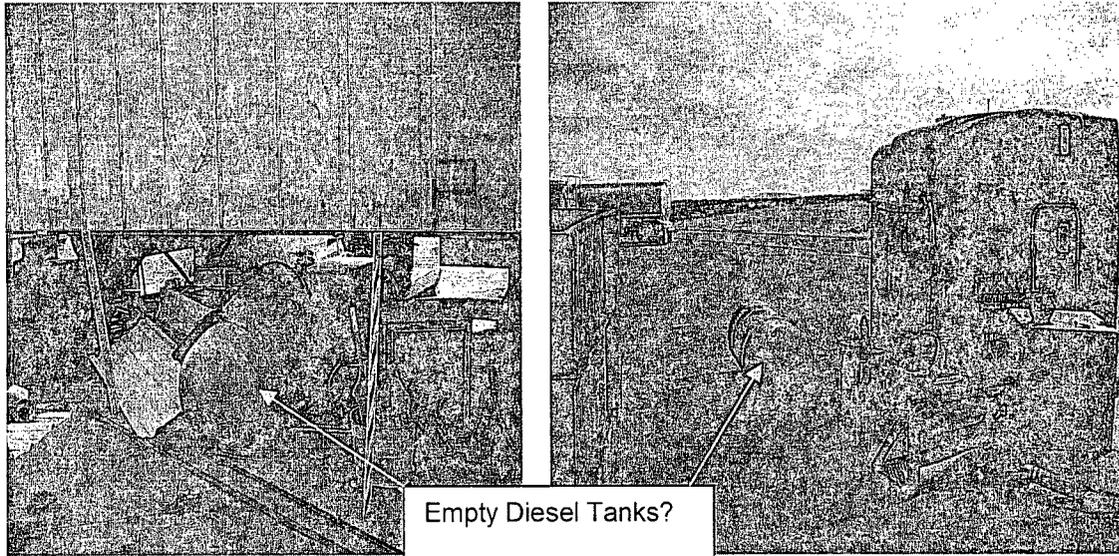
Stained soil piled up off of
containment



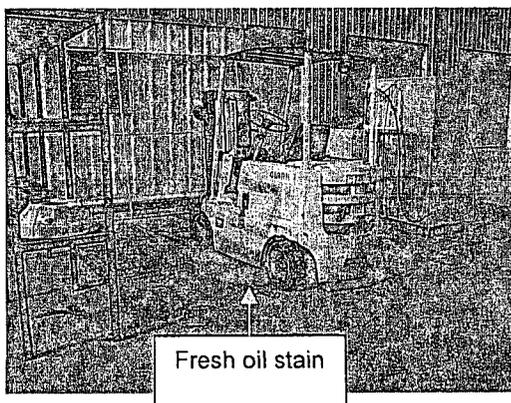
10. The Regional Office, Transportation Maintenance Facility and associated parking lots were inspected. Housekeeping was observed to be fair. There are several barrels and hoses placed off of containment.



11. There are three diesel tanks stored east of the Shop. Two appear to be empty but one is attached to a wrecked truck and seems to contain diesel. They are not on containment.



12. The forklift appears to have an oil leak that would contribute to Stormwater pollution.



Storm Water Pollution Prevention Plan	Year - 2006
Annual Self-Audit Inspection Report	

Recommendations:

1. Improve housekeeping efforts in the warehouse yard. All containers should be properly stored on containment and properly labeled (empty, etc.) Containments should be kept free of liquids to prevent overflow during a precipitation event.
2. Repair the berm around the perimeter of the warehouse yard.
3. Improve housekeeping within the units. Upgrade containment areas if necessary (Poly Pad and E-119) and upgrade or improve blowdown pots if necessary.
4. Improve housekeeping efforts in the Tank Farm. Properly label buckets and keep them from overflowing. Containments should be kept free of liquids to prevent overflow during a precipitation event. Initiate work orders to remediate stained soil when a spill occurs.
5. Repair tankage berms throughout the Tank Farm.
6. Containments in the Fire Training Grounds should be kept free of liquids to prevent overflow during a precipitation event.
7. Improve Housekeeping at the Terminals and clean out the berm at Tank #44.
8. The Transportation Shop must improve housekeeping efforts. Empty barrels should either be marked as empty or promptly be removed and disposed of properly. Hoses must be clean and free of residual oil or potential pollutant.
9. Diesel tanks must be stored empty and marked as such or placed on containment if they contain fuel.
10. The Transportation Shop must keep their equipment maintained (i.e. repair leaks on the forklift) to prevent stormwater pollution.

Reviewed by:



Name/Title:

Todd Doyle, Refinery Manager

Date:

11/9/06

Storm Water Pollution Prevention Plan	Year - 2005
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Team Meeting Date: **Wednesday, December 7, 2005 (10:30 AM)**

Team Members Present: **Cindy Hurtado (Team Leader)
Randy Schmaltz (Environmental Manager)
Ed Riege (Environmental Superintendent)
Vic McDaniel (Operations Manager)
Jim Stiffler (Safety Manager)
Frank Sullivan (Safety Supervisor)
Dave Richards (Regulatory Coordinator – Giant Transportation)
Chad King (Refinery Manager)
Don Wimsatt (Maintenance Manager)**

Meeting Minutes:

A meeting of the SWPPP Team was conducted in order to review the current status of the SWPPP and discuss new information, regulations, inspection reports, changes, revisions, and updating of the plan. Key issues and decisions are summarized below.

1. The SWPPP Team Member section will be updated to show the current members and associated responsibilities. Dave Richards is the Regulatory Coordinator for Giant Transportation and attended the meeting for Bill Robertson (Transportation Facility Manager).
2. Storm water samples were collected on January 4 & 5, 2005, and October 10, 2005 and then analyzed by Hall Environmental Laboratory. No significant pollutants were detected in these samples. Two years of extensive sampling has occurred. Semi-annual effluent analysis will now be limited to TSS, Total Chromium, BTEX, MTBE, Total Nitrate, Total Phosphorous, and Oil and Grease.
3. The 2005 self-audit inspection report was reviewed and the recommendations were addressed. Documentation for ongoing maintenance and other refinery improvements will be in the form of before and after photographs as well as work order printouts.
4. There was discussion on whether the Transportation Shop should produce their own SWPPP as they are under separate leadership than the Refinery. Dave was going to investigate the proposal.
5. 2005 training will emphasize Best Management Practices to improve housekeeping efforts. Significance will be placed on proper storage of buckets, barrels, and containers.

Storm Water Pollution Prevention Plan	Year - 2005
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

6. Another suggestion was to have designated personnel from the Transportation Shop conduct containment and drain checks after storm water events.

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

Date:

12/13/05

Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	

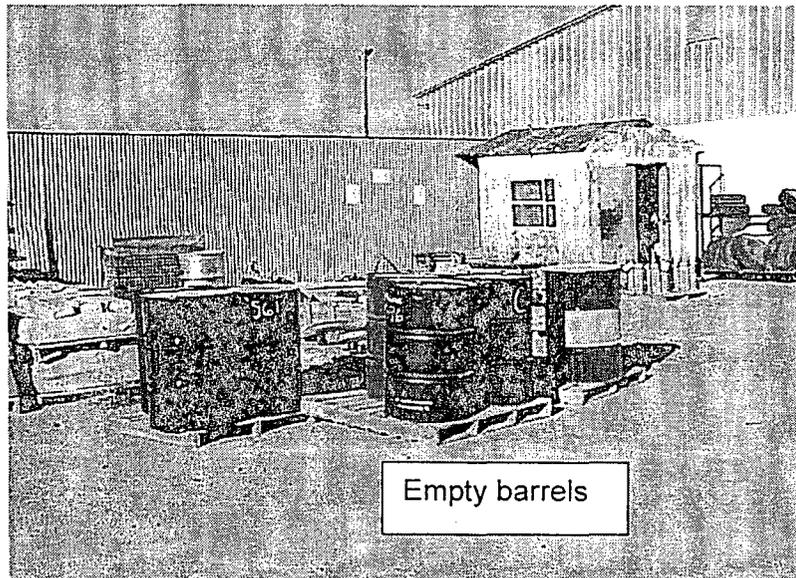
Audit Performed By: **Ed Riege, Environmental Superintendent
Cindy Hurtado, Environmental Coordinator**

Dates Performed: **Tuesday, November 22, 2005**

Observations & Findings:

A walking tour and comprehensive visual inspection of the Refinery, Terminal, Transportation Shop, and surrounding vicinity was conducted on Tuesday, November 22, 2005. The weather was clear and mild. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

1. The west storage yard was inspected first. Totes and 55 gallon drums containing various petroleum and chemical products were observed within the yard and stored properly. Empty barrels should be stored in the boneyard with the barrel lying down with the bungs parallel to the ground. The ground surface showed no indication of staining or recent spills. Housekeeping was adequate. The used oil container and surrounding area was in clean and tidy condition.

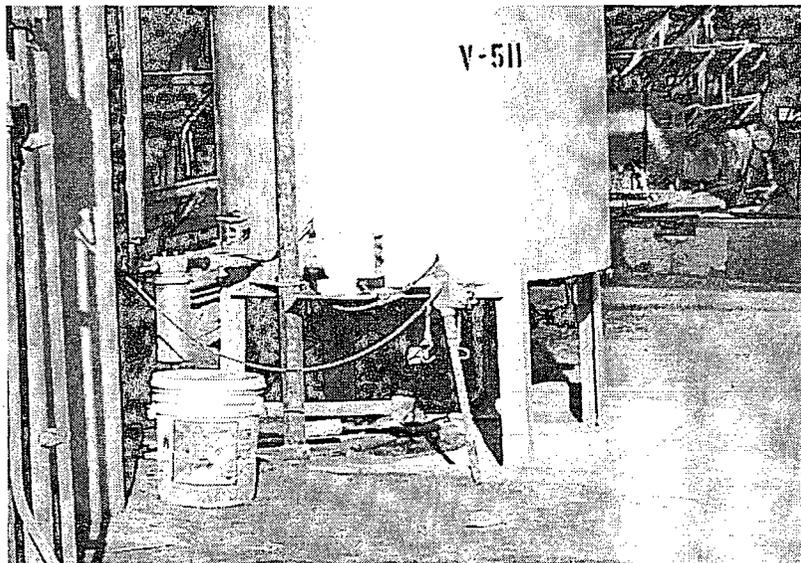


2. The main office, warehouse, and parking areas were visually inspected. Chemical products, outdoor chemical or petroleum storage was observed to be stored properly. The ground surface showed no indication of staining.

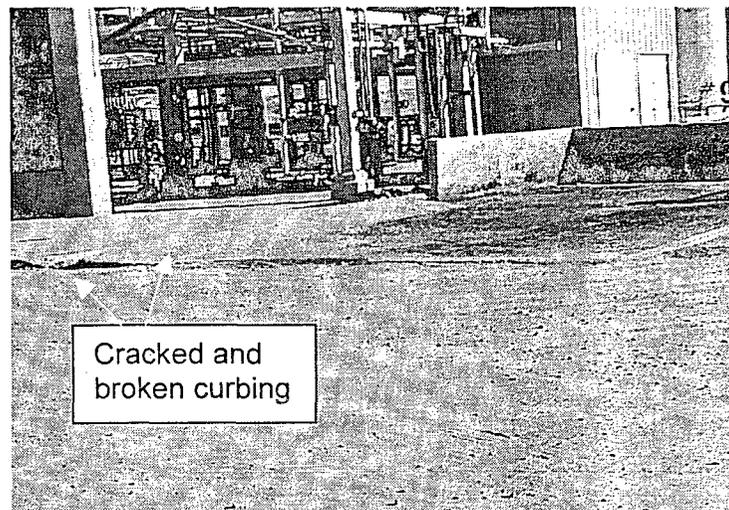
Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	

The side ditch on the north side of County Road 4990 was clean with no visible obstructions.

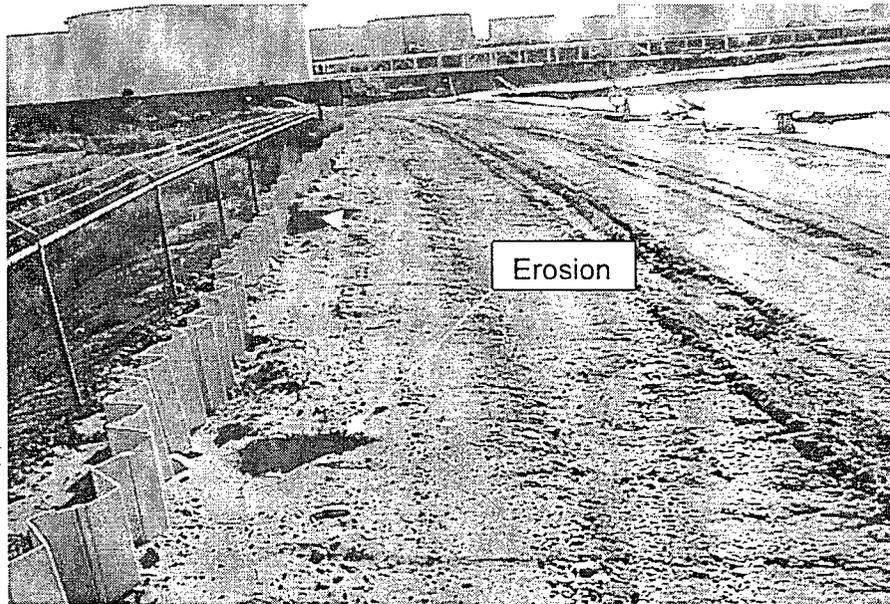
3. The process area was visually inspected. Housekeeping was observed to be adequate. A bucket of Sulfuric Acid was observed off of containment near the #2 Cooling Tower.



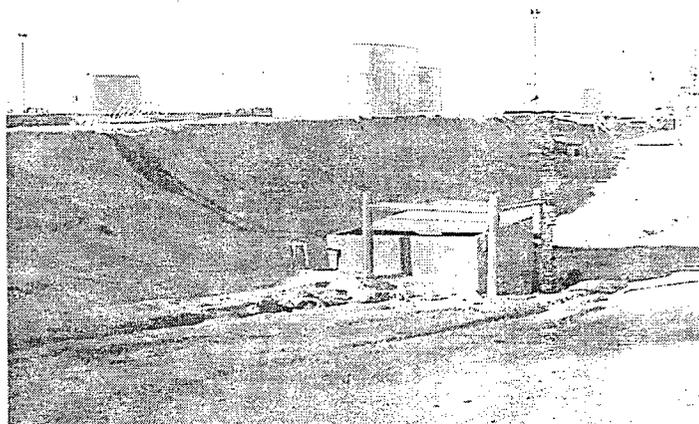
Most secondary containment pads were observed to be clean and tidy. Secondary containment pads were observed to be structurally competent for spill and storm water containment with the exception of the Poly Unit Catalyst Pad. Cracked curbing needs to be repaired and built up to prevent spills and runoff from leaving the containment area.

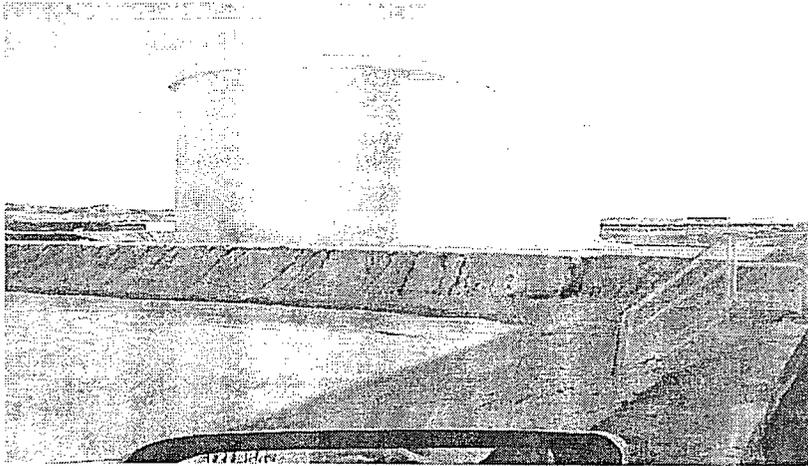


4. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 20 inches of freeboard space available. The retaining wall installed on the north side of the aeration lagoons showed signs of erosion.

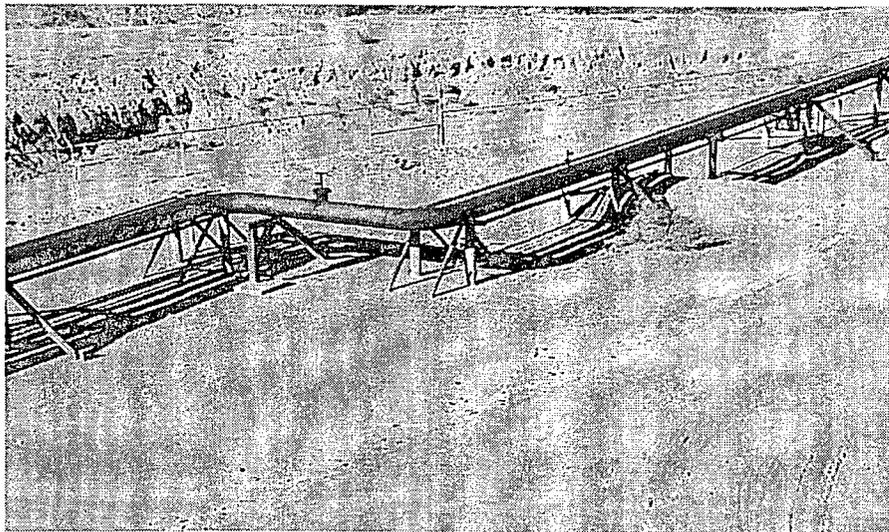


5. The Tank Farm and ancillary tankage areas were visually inspected. In general, housekeeping was observed to be in good order. Some tankage berms are showing signs of erosion.



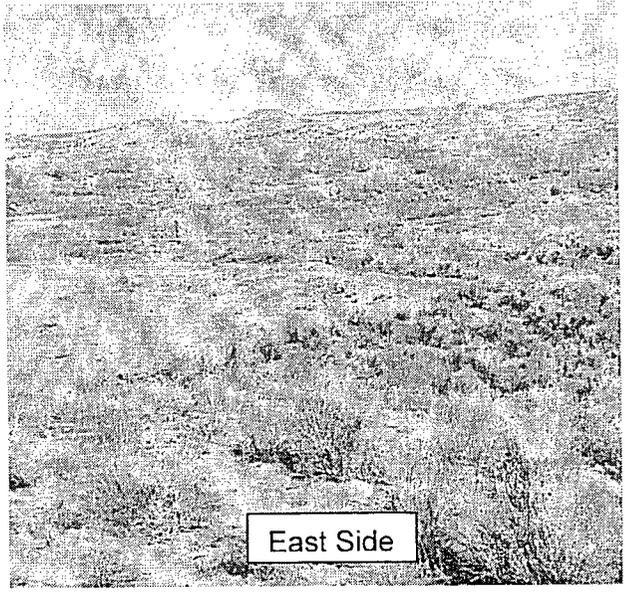
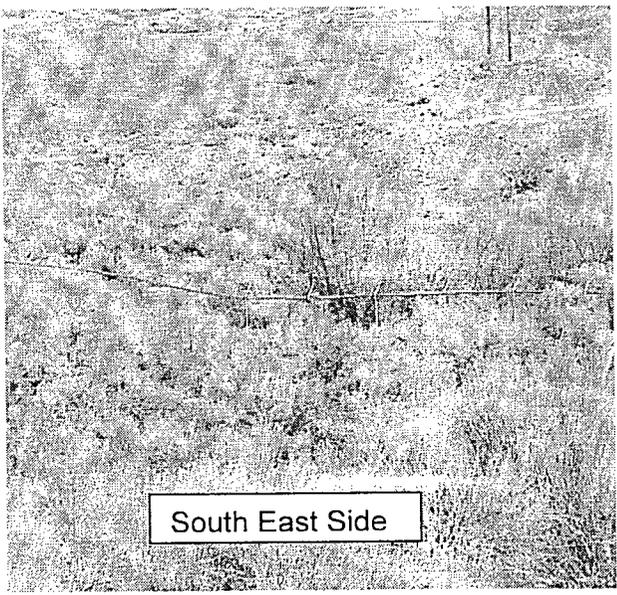


The containment area west of the flare is filling in, contains weeds and shrubs and is beaten down on the west side.

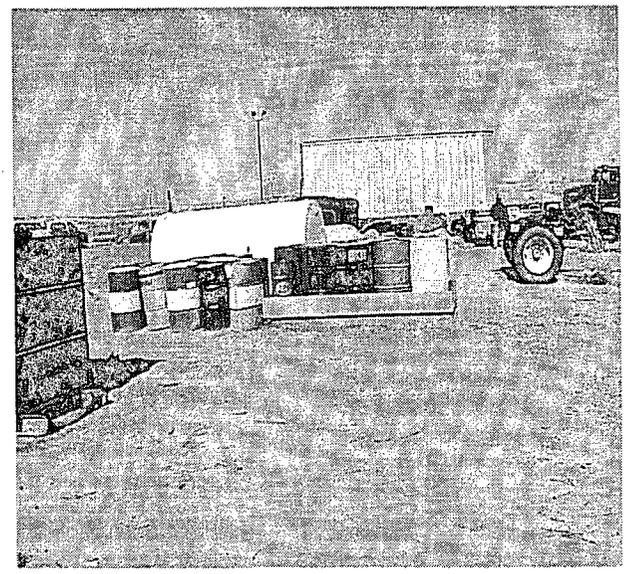
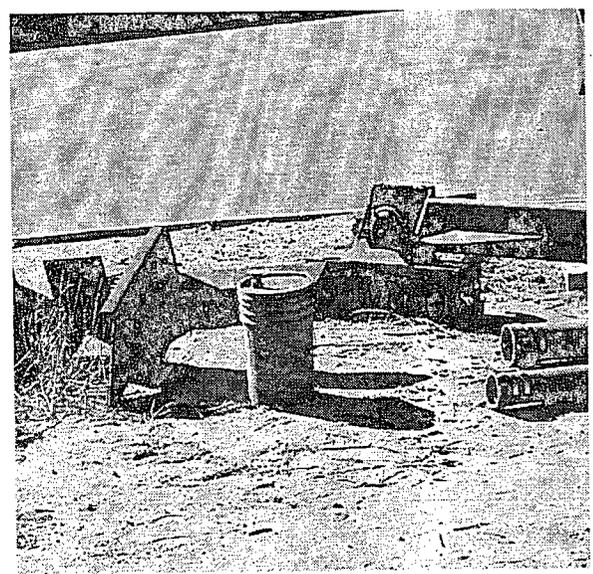


6. The Fire Training Area was visually inspected. Berms were observed to be in good condition.
7. The Onsite Landfill was visually inspected. The sulfur, FCC fines, and FCC spent catalyst were covered with soil, however, berms were in need of repair on the east and southeast side of the landfill area.

Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	

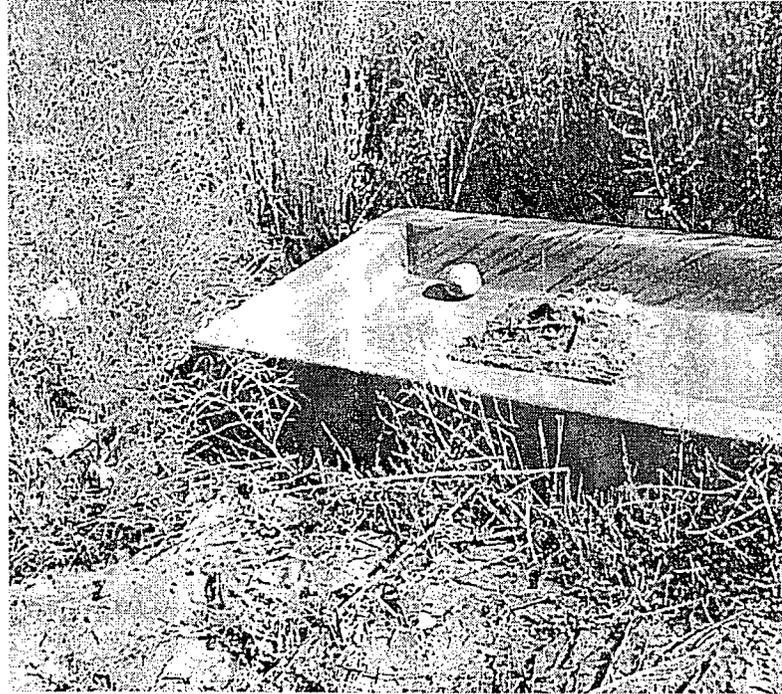


- 8. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be adequate. No problem areas were identified.
- 9. The Terminal Area was visually inspected. Housekeeping was observed to be in good order.
- 10. The Regional Office, Transportation Maintenance Facility and associated parking lots were inspected. Housekeeping was observed to be deficient. There are several barrels and containers placed off of containment.



Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	

11. The parking lot drain for the Transportation Shop is plugged up and severe erosion has occurred around it.



Recommendations:

1. Improve housekeeping efforts. Empty barrels should either be marked as empty or promptly be removed and disposed of properly.
2. Containers (i.e. buckets) should be stored on containment.
3. Repair the curbing at the Poly Unit Catalyst Pad.
4. Repair erosion damage to the retaining wall
5. Repair tankage berms throughout the Tank Farm.
6. Clean the brush and weeds out of the containment west of the flare. Clean out the sediment and build up the berm.
7. Build up the perimeter berms surrounding the Onsite Landfill.

Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	

8. The Transportation Shop must improve housekeeping efforts. Empty barrels should either be marked as empty or promptly be removed and disposed of properly. Buckets and barrels containing material must be stored on containment.

9. Clean out the Transportation Shop drain and repair the erosion damage.

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

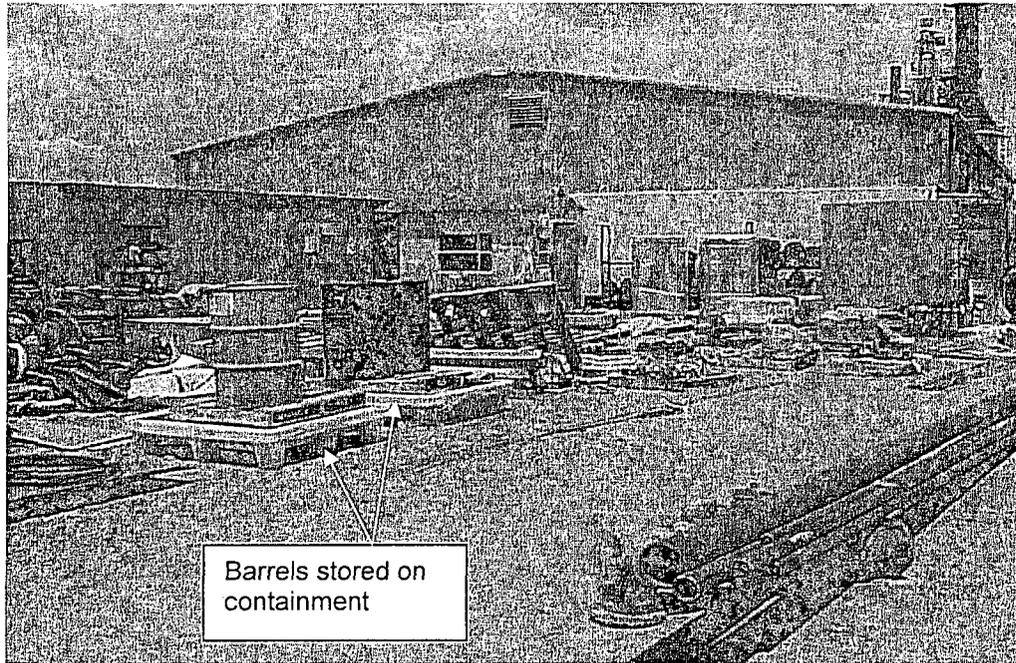
Date:

12/07/05

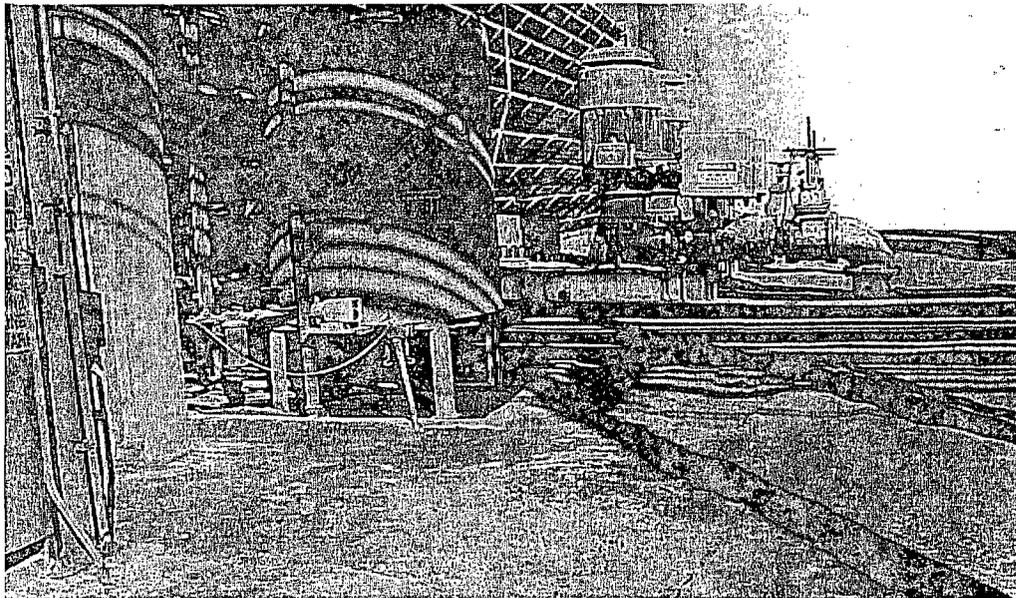
Storm Water Pollution Prevention Plan	Year - 2006
2005 Annual Self-Audit Inspection Report	Page 1

Follow up actions to 2005 SWPPP Audit

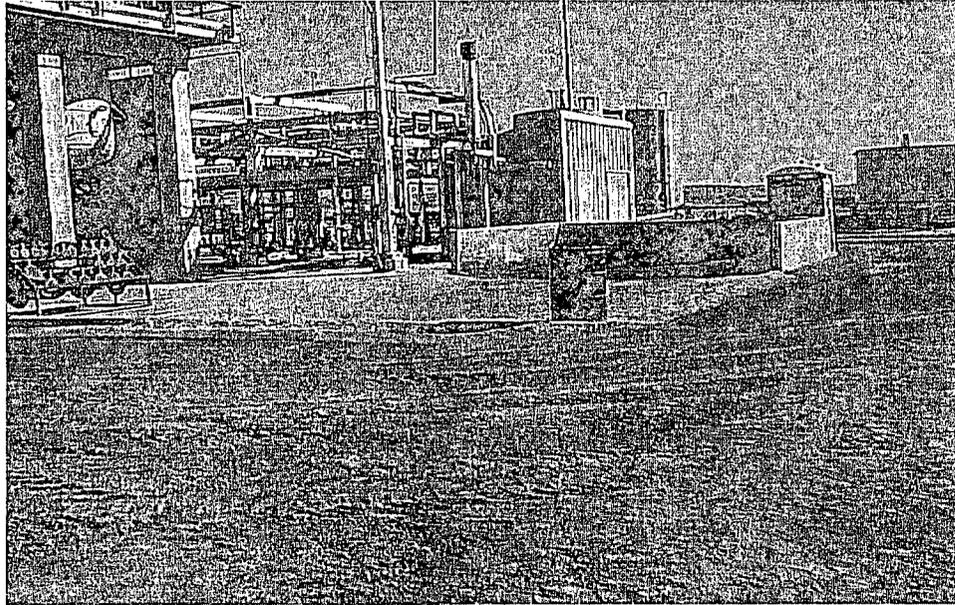
1. Housekeeping efforts have improved. Empty barrels have been removed and stored properly. Full barrels are being stored on containment.



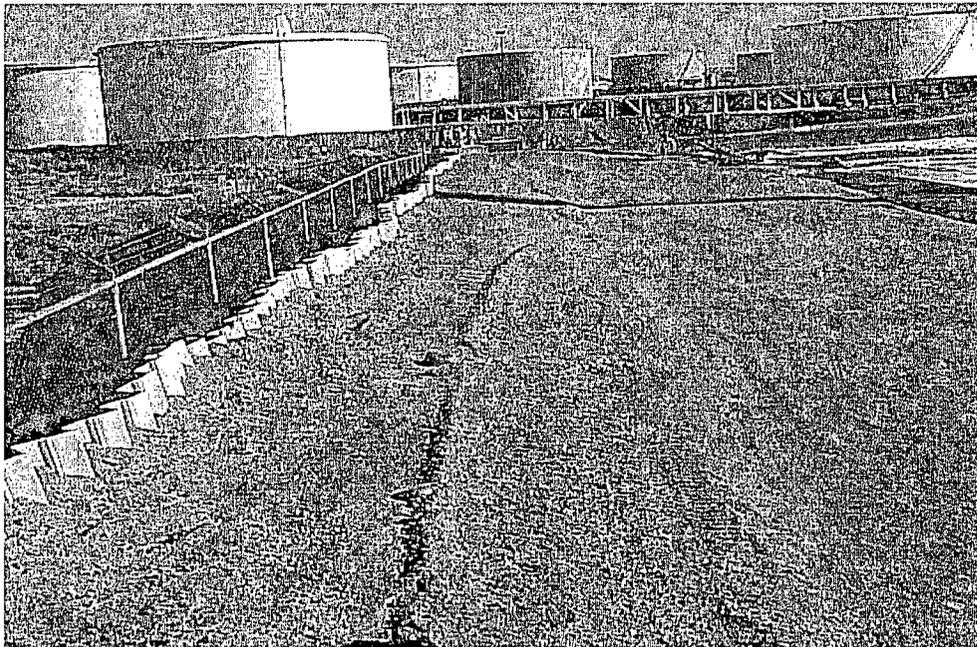
2. The bucket has been removed and is stored on containment.



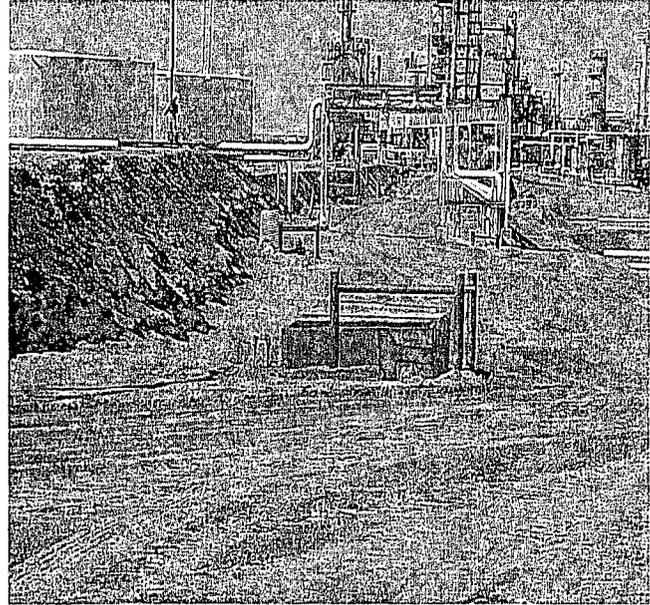
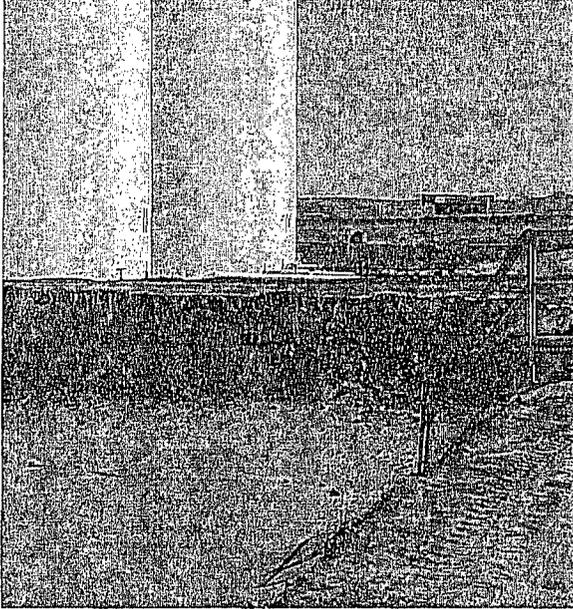
3. A berm has been built up around the Poly Unit Catalyst Pad.



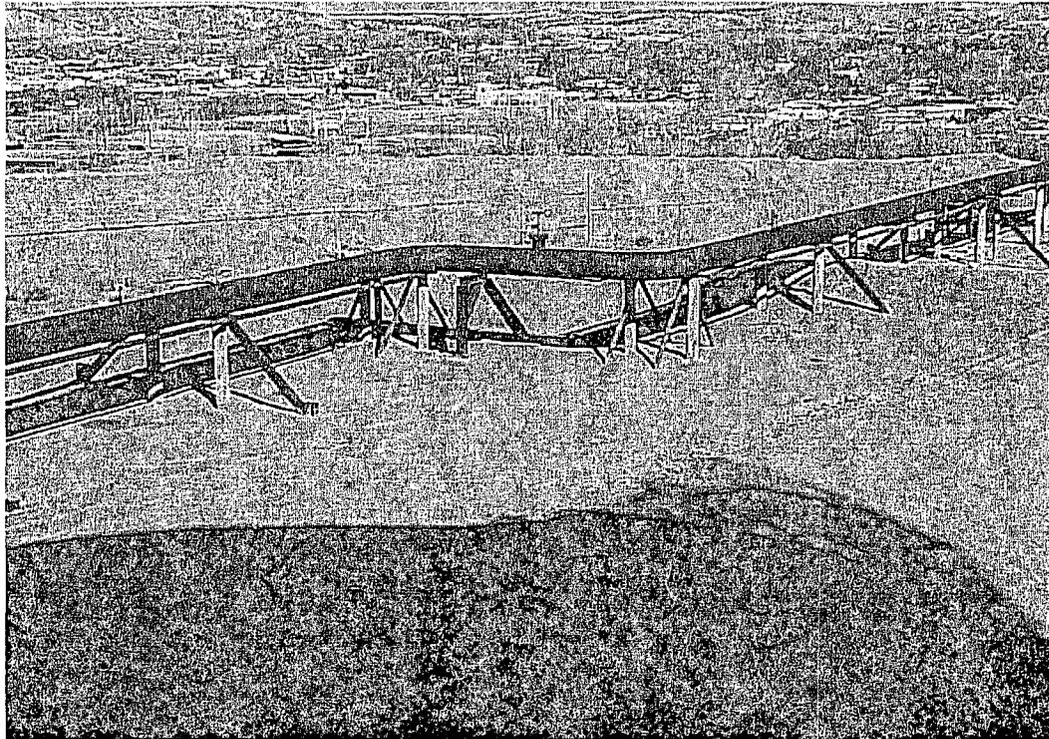
4. Erosion damage has been repaired to the retaining wall on the north side of the aeration lagoons.



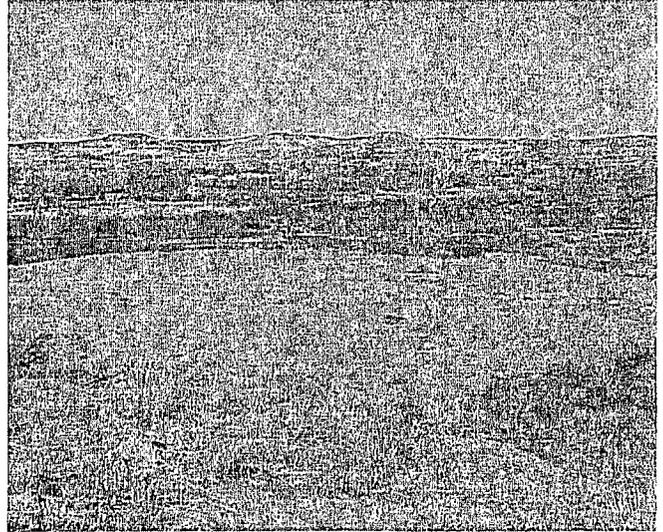
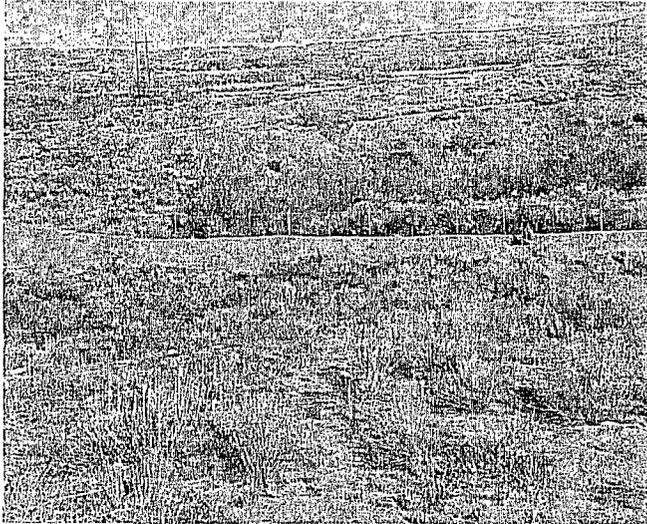
5. Tank berms have been upgraded throughout the Tank Farm.



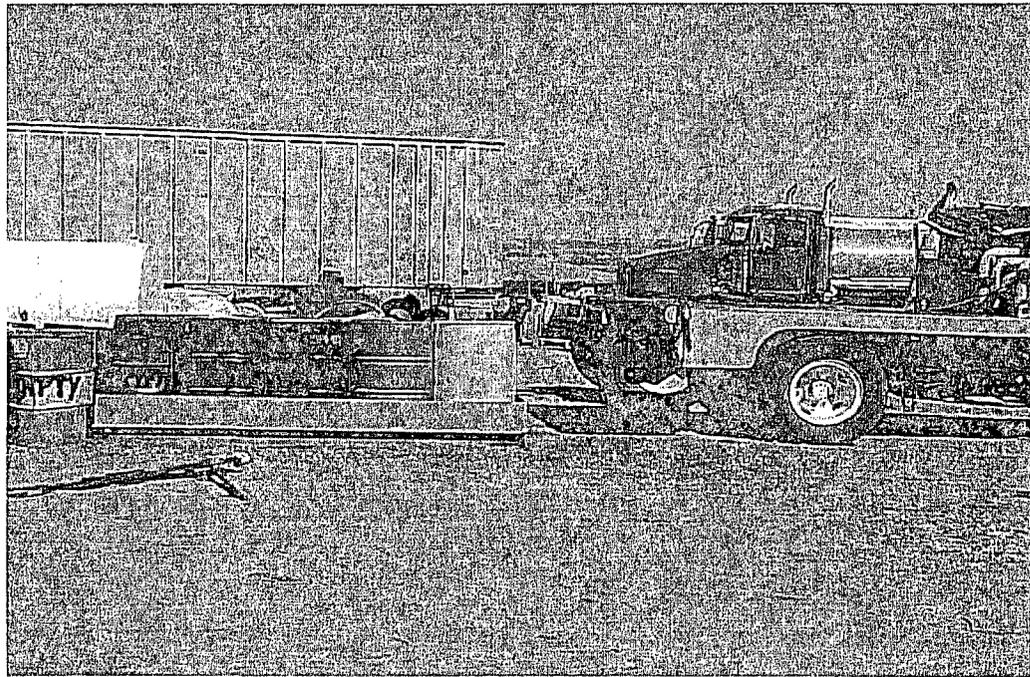
6. The containment west of the flare has been cleaned out and upgraded.



7. The perimeter berms on the On-Site Landfill have been built up.



8. Housekeeping has improved at the Transportation Shop. Empty barrels are labeled and full barrels are on containment.



Storm Water Pollution Prevention Plan	Year - 2006
2005 Annual Self-Audit Inspection Report	Page 5

9. Erosion damage has been repaired and the drain cleaned out.



Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	

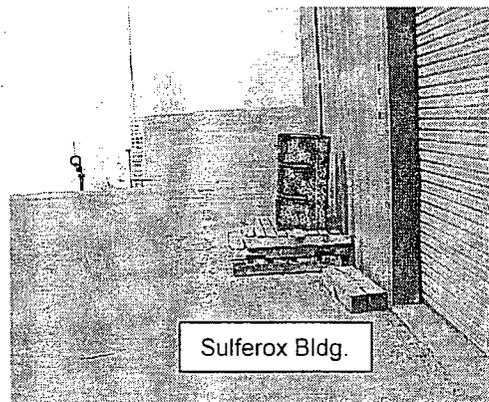
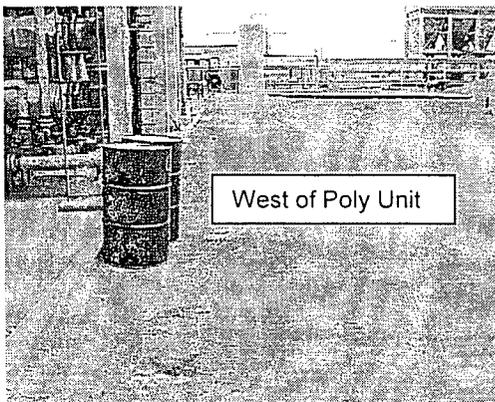
Audit Performed By: **Randy Schmaltz, Environmental Supervisor
Cindy Hurtado, Environmental Assistant**

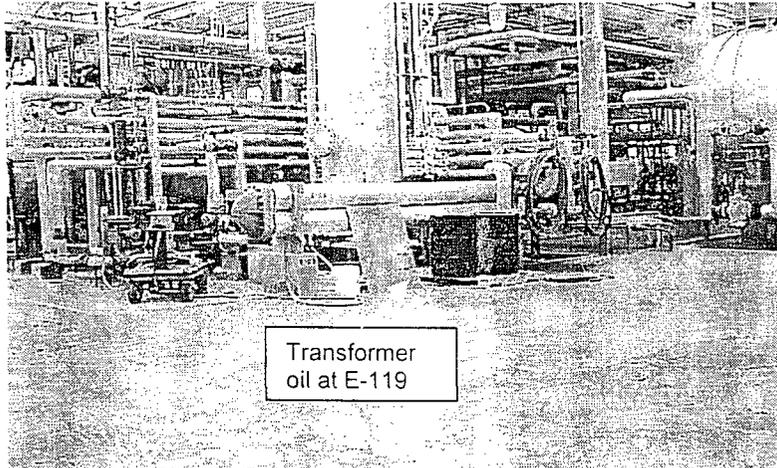
Dates Performed: **Monday, December 6, 2004
Thursday, December 8, 2004**

Observations & Findings:

A walking tour and comprehensive visual inspection of the Refinery, Terminal, Transportation Shop, and surrounding vicinity was conducted on Monday, December 6, 2004 and Thursday, December 8, 2004. The weather was cloudy and cold. Rain and snow flurries had been reported during the prior week. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

1. The west storage yard was inspected first. Totes and 55 gallon drums containing various petroleum and chemical products were observed within the yard and stored properly. The ground surface showed no indication of staining or recent spills. Housekeeping was adequate. The used oil container and surrounding area was in clean and tidy condition.
2. The main office, warehouse, and parking areas were visually inspected. No chemical products, outdoor chemical or petroleum storage was observed. The ground surface showed no indication of staining. The side ditch on the north side of County Road 4990 was clean with no visible obstructions.
3. The process area was visually inspected. Housekeeping was observed to be deficient. Transformer oil was stored by E-119 off of containment, and barrels were placed off of containment at the Sulferox and west of the Poly Unit.

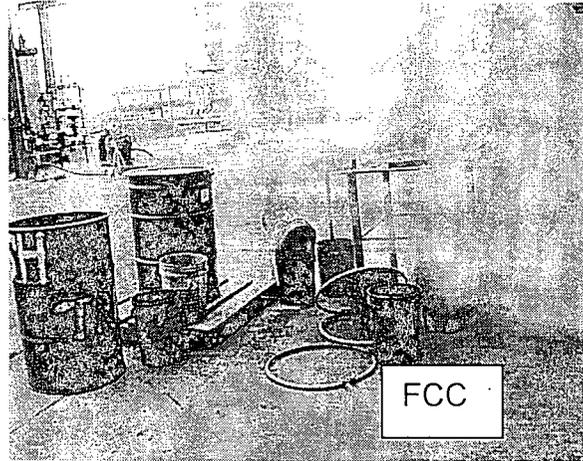




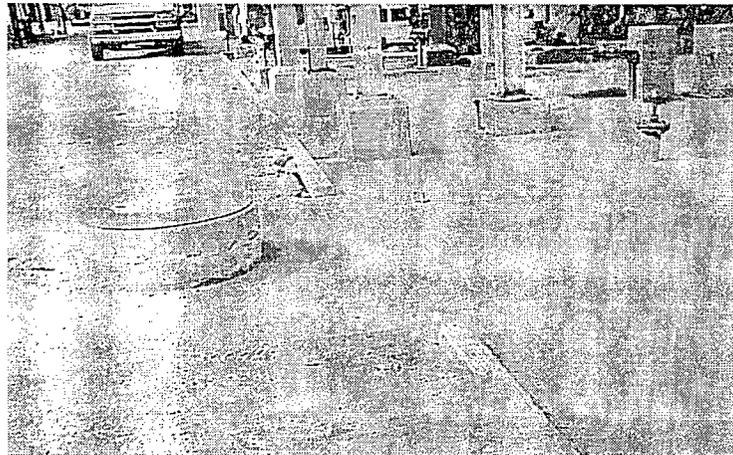
Barrels of anti-freeze were placed on the C-801 deck but they are not on or over containment.



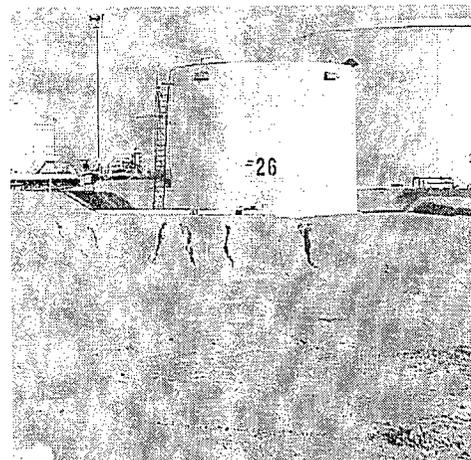
Most secondary containment pads were observed to be clean and tidy with the exception of the FCC. Several unlabeled buckets of material were placed around the trash barrel and the satellite hazardous waste barrel on the southeast corner of the FCC.



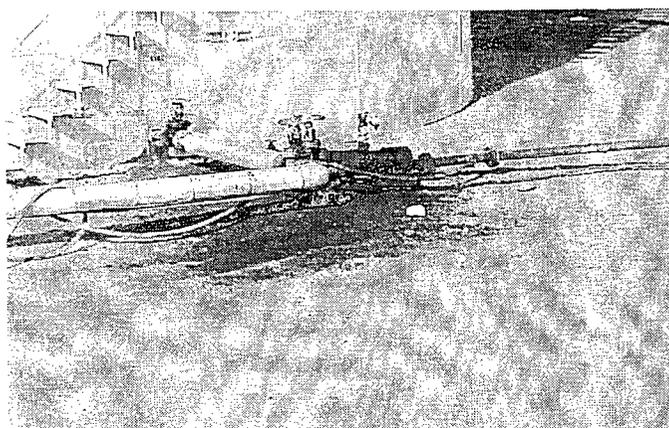
Secondary containment pads were observed to be structurally competent for spill and storm water containment with the exception of a section of curbing in the Treater Unit. This segment does not slope back onto containment.



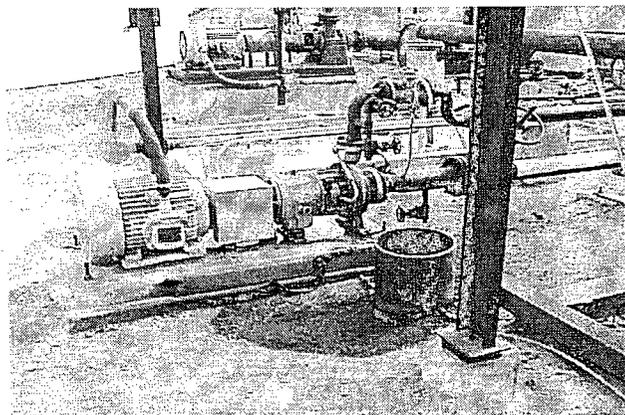
4. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 20 inches of freeboard space available. The north sidewall was inspected and found to be structurally competent with no indication of erosion or deterioration.
5. The Tank Farm and ancillary tankage areas were visually inspected. In general, housekeeping was observed to be in good order. Some tankage berms are showing signs of erosion. Stained soil was observed inside the dike at Tk #29. Remediation work is in progress.



Staining was observed at the Tk #27 Sample point. Remediation work is in progress.

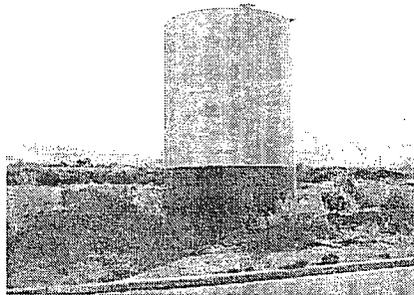


P-620 located between Tank#3 and Tank #4 was visibly leaking and staining the ground.

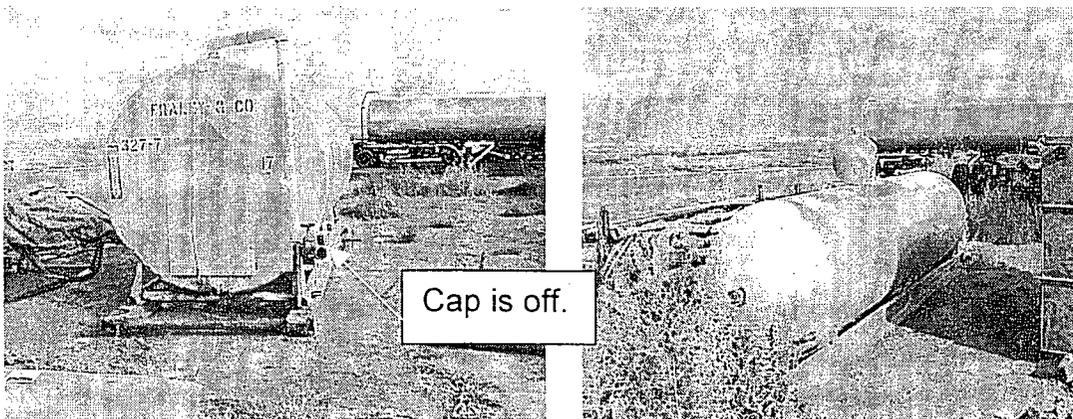


Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	

6. The Fire Training Area was visually inspected. Berms were observed to be in good condition.
7. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be adequate. No problem areas were identified.
8. The Terminal Area was visually inspected. Housekeeping was observed to be in good order.
9. The Regional Office, Transportation Maintenance Facility and associated parking lots were inspected. The berm around the water storage tank is overgrown with brush and weeds, which greatly diminishes dike capacity. The tank does not have any identification on it.

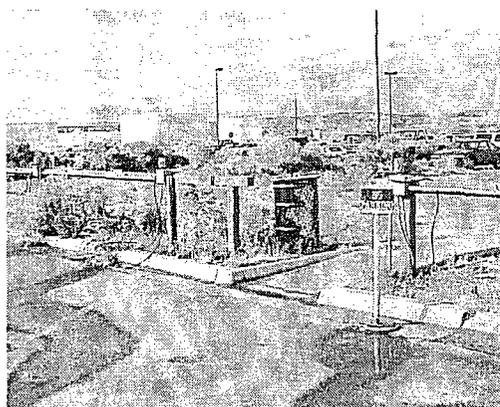
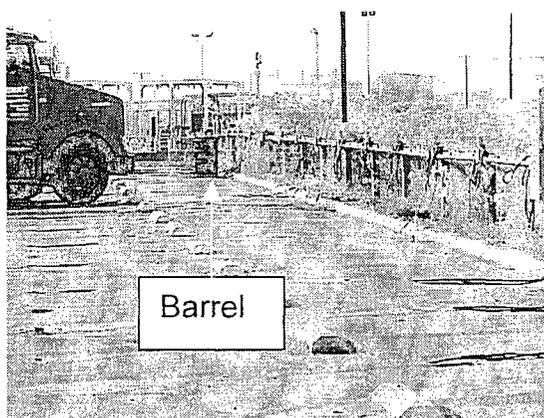


Two fuel tanks were stored without secondary containment. Caps were not in place.



Unlabeled barrels were stored outside of containment.

Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	



Recommendations:

1. Improve housekeeping efforts. Empty barrels should either be marked as empty or promptly be removed and disposed of properly. Unlabeled buckets containing material should either be properly marked or the material should be disposed of quickly and in an approved manner. For example, the buckets in the FCC containing main column bottoms sludge should be emptied into the satellite hazardous waste barrel, steam out the bucket and reuse it again.
2. Place the barrels of anti-freeze on or over containment.
3. Install curbing in the Treater Unit.
4. Repair tankage berms throughout the Tank Farm.
5. Improve the sampling point or the sampling procedure to prevent spatter and spills at Tank #27. Continue remediation efforts.
6. Revamp P-620 so that it doesn't pressure up and cause seal leaks or modify the operating procedure. Continue remediation efforts.
7. Clean out the berm at the water storage tank and place identification on the tank.
8. Identify the fuel tanks as empty if that is the case or store the tanks within secondary containment with all caps properly in place.

Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	

9. Label the barrels as trash if that is the case, otherwise they must be labeled properly and stored on secondary containment or under cover.

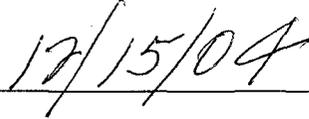
Reviewed by:



Name/Title:

Chad King, Refinery Manager

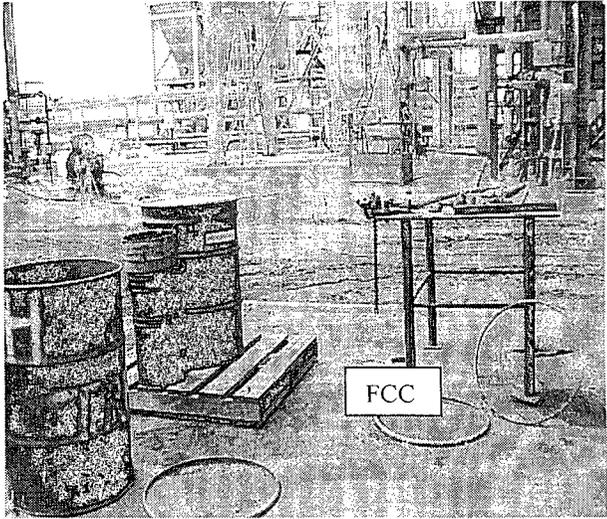
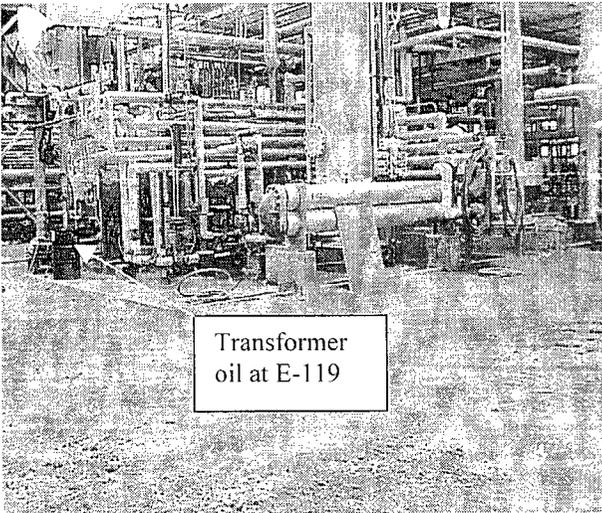
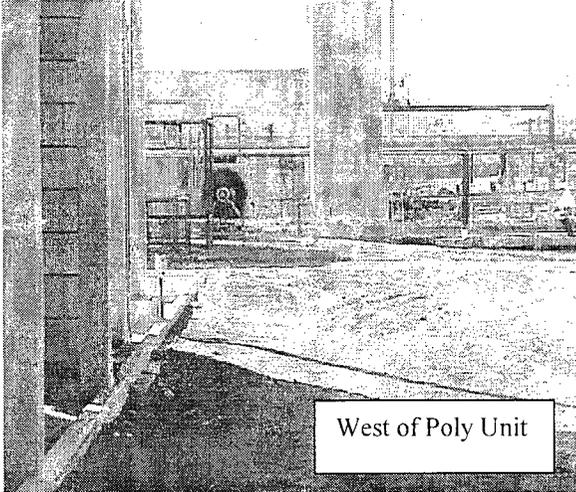
Date:



Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 1

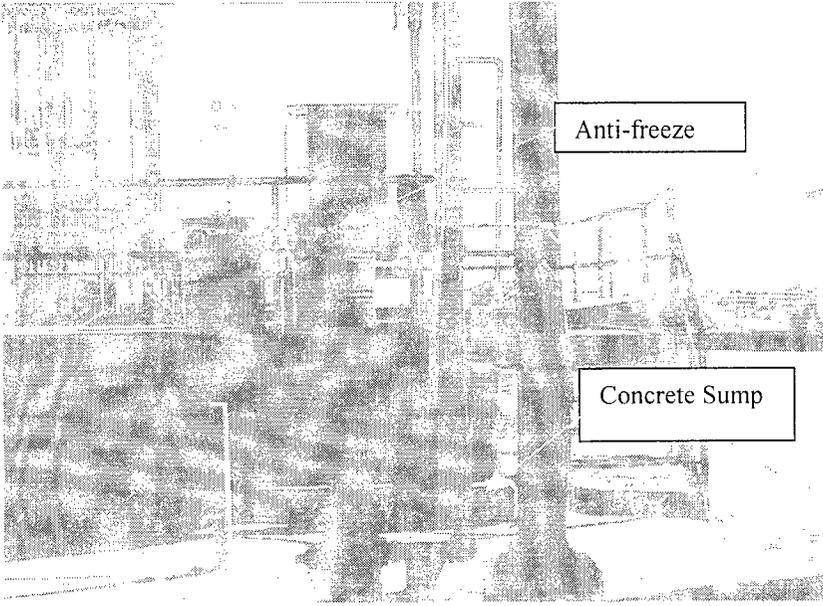
Follow up actions to 2004 SWPPP Audit

- 1. Housekeeping efforts have improved. Empty barrels have been removed. Transformer oil is being stored on containment. Buckets of sludge are promptly emptied into the satellite hazardous waste barrel.

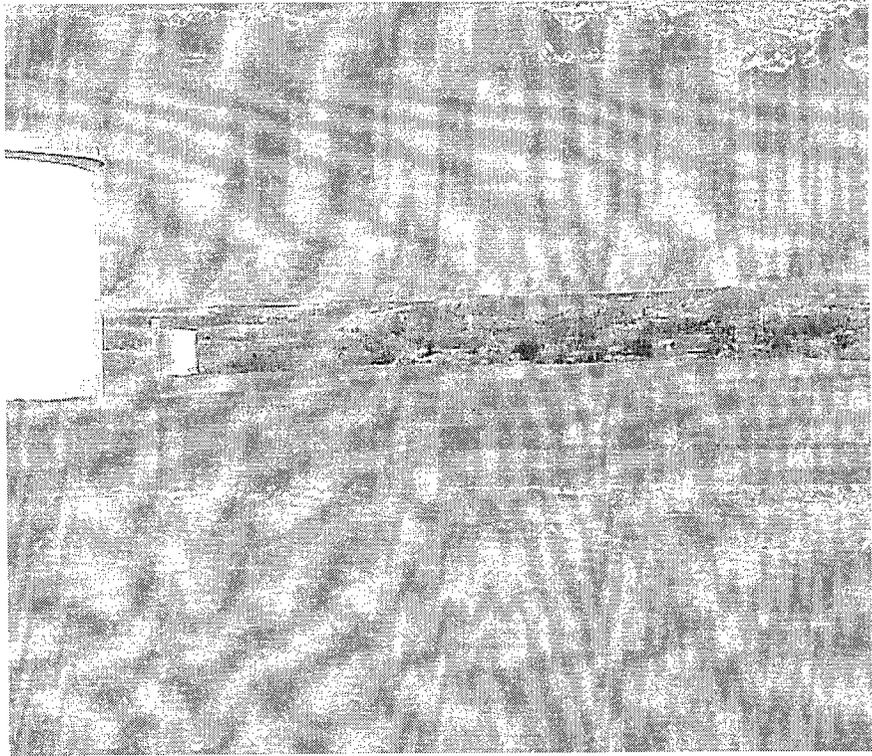


Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 2

2. Anti-freeze is being stored over containment at the C-801 Compressor Dock.

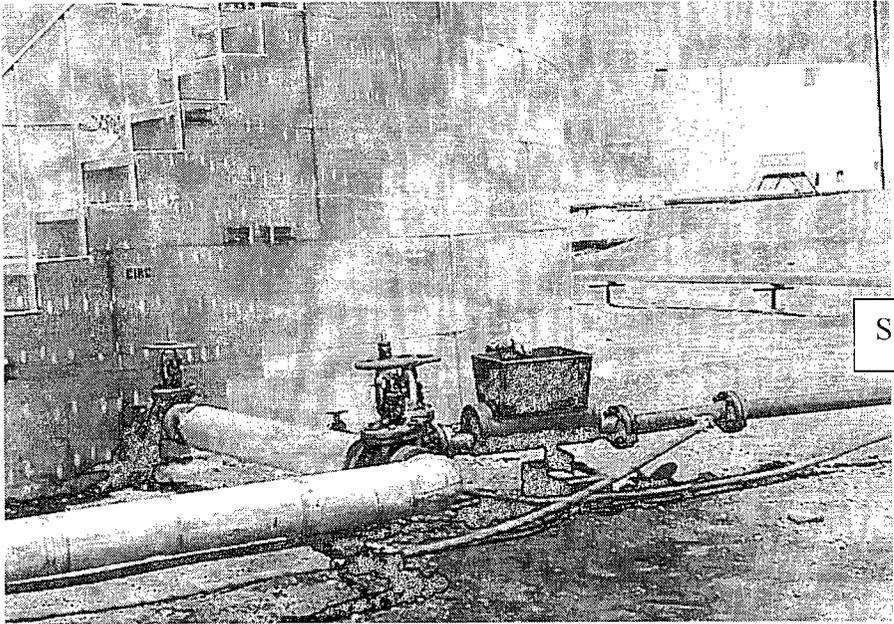


3. Tank Farm dike repair occurred in March 2005.



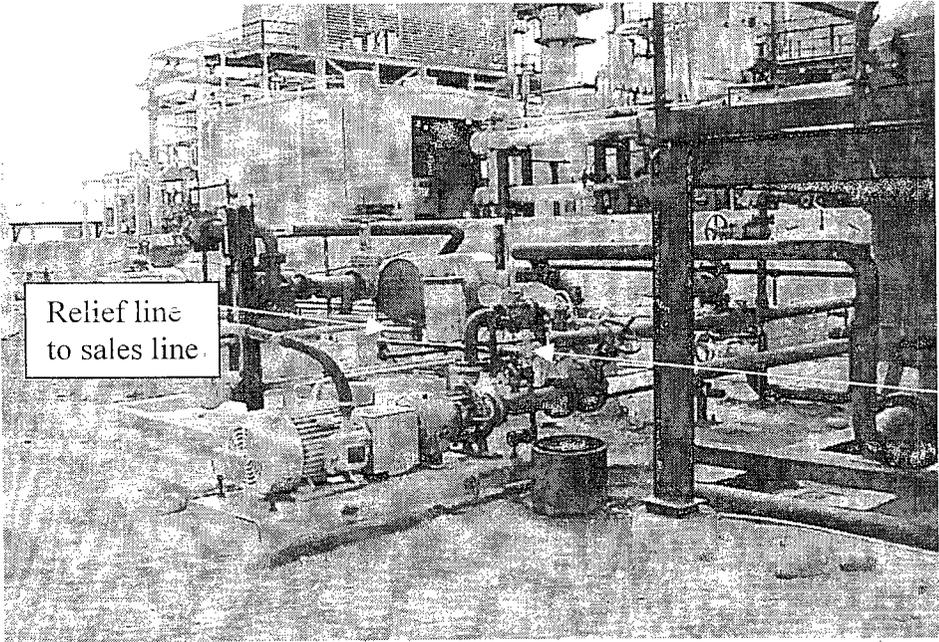
Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 3

4. Rebuilt sample pot at Tank #27 so that it catches splatters and sprays. Remediation of the area is on going.



Sample pot

5. A pressure relief valve was installed on the suction side of P-620. If the pump pressures up it will relieve into the sales line of Tank #3 and #4 instead of blowing the seal and leaking

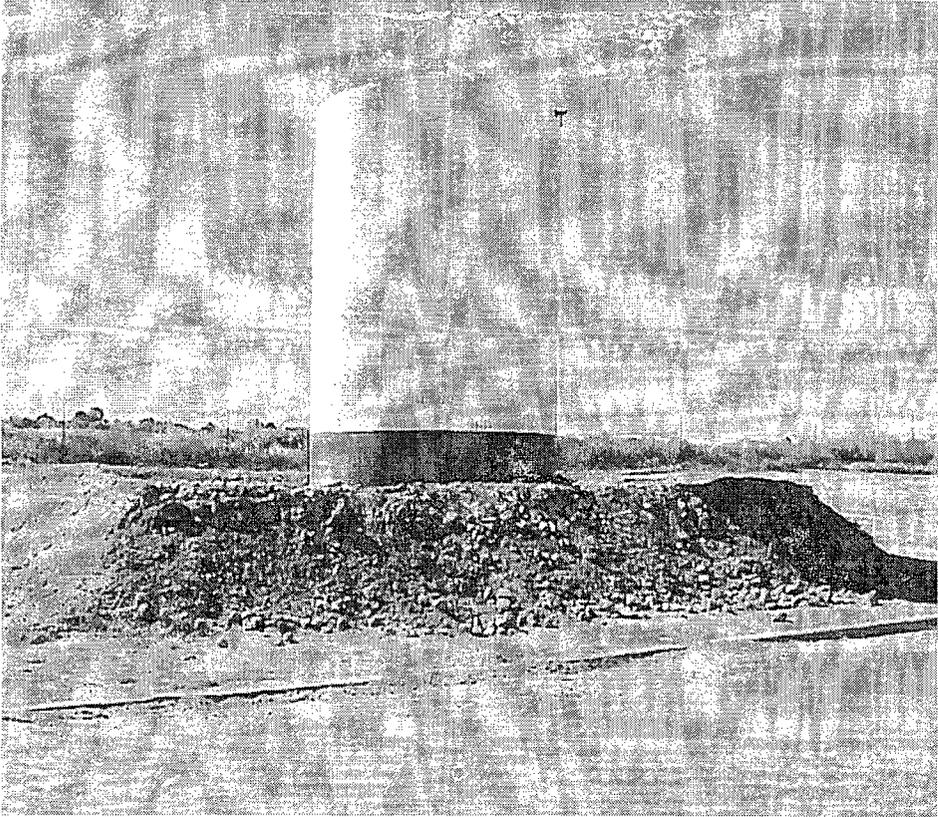


Relief line to sales line

Relief Valve

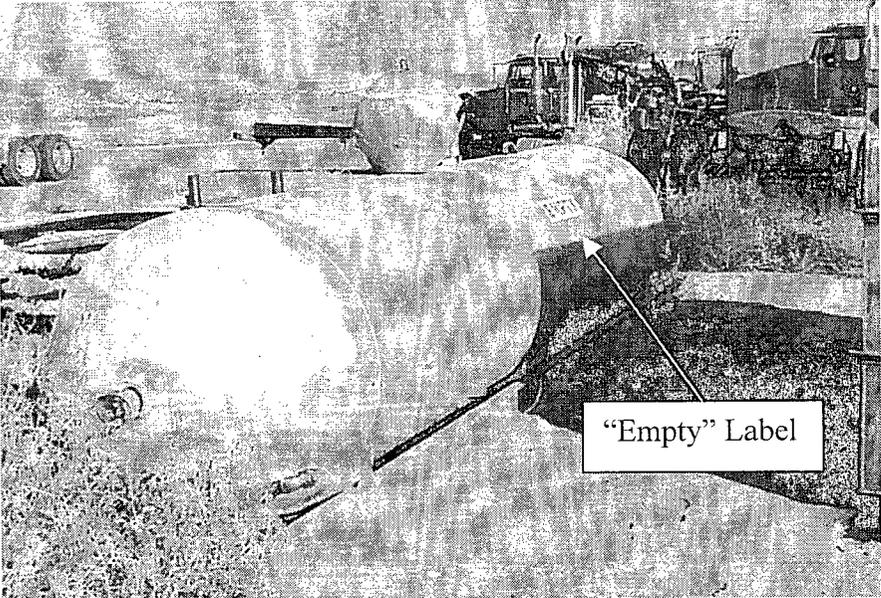
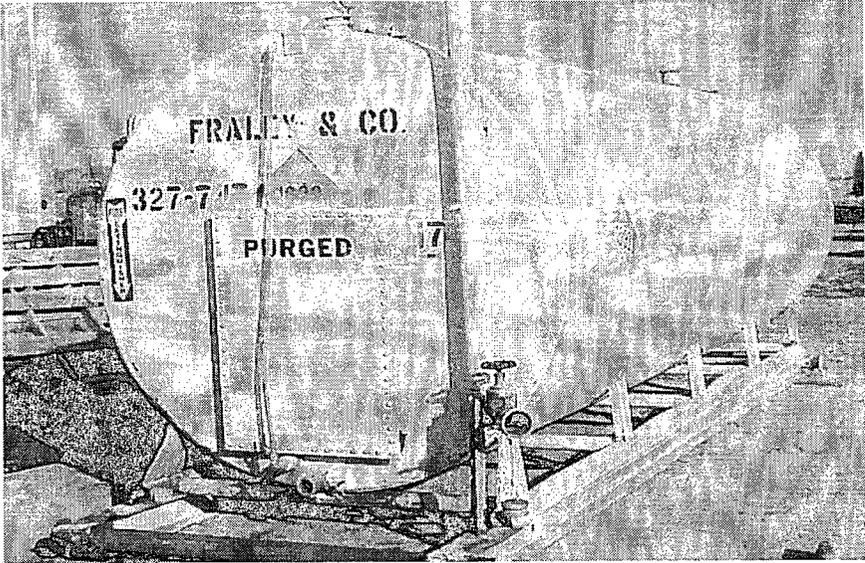
Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 4

6. The water storage tank at the Transportation Maintenance Facility has been labeled and the berm has been cleaned out and repaired.

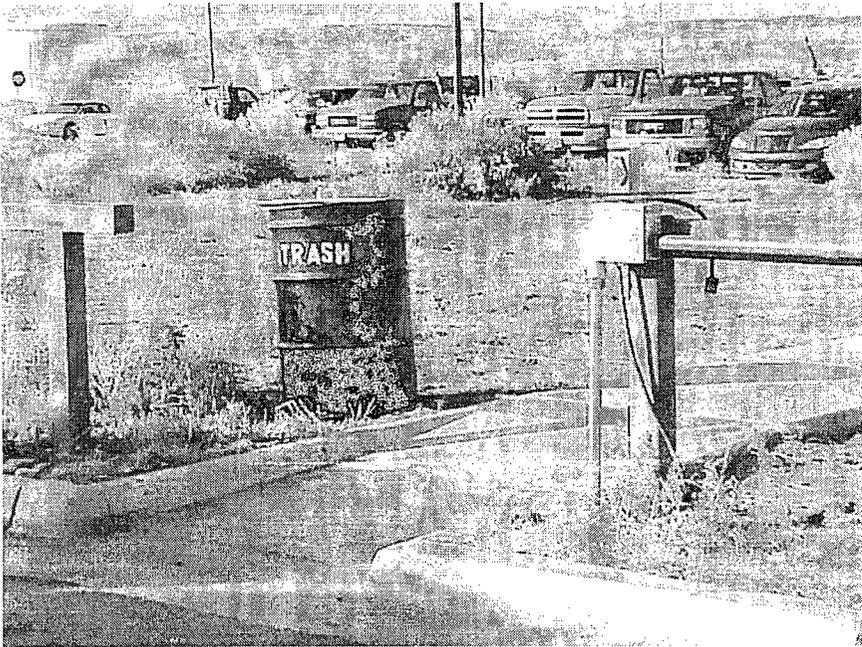


Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 5

7. Fuel tanks and trash barrels at Transportation Maintenance Facility have been labeled appropriately.



Storm Water Pollution Prevention Plan	Year - 2005
Annual Self-Audit Inspection Report	Page 6



Storm Water Pollution Prevention Plan	Year - 2004
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Team Meeting Date: **Thursday, December 15, 2004 (1:00 PM)**

Team Members Present: **Cindy Hurtado (Team Leader)
Randy Schmaltz (Environmental Supervisor)
Ed Riege (Environmental Superintendent)
Vic McDaniel (Operations Manager)
Frank Sullivan (Safety Supervisor)
Bill Robertson (Transportation Facility Manager)
Chad King (Refinery Manager)
Don Wimsatt (Maintenance Manager)**

Meeting Minutes:

A meeting of the SWPPP Team was conducted in order to review the current status of the SWPPP and discuss new information, regulations, inspection reports, changes, revisions, and updating of the plan. Key issues and decisions are summarized below.

1. The SWPPP Team Member section will be updated to show the current members and associated responsibilities. Vic McDaniel has replaced Craig Meldrum as Operations Manager and Bill Robertson has replaced Gary Winn as Transportation Facility Manager. Frank Sullivan (Safety Supervisor) attended since Jim Stiffler (Safety Manager) was unable to be present.
2. Storm water samples were collected on January 15, 2004, February 4, 2004 and September 29, 2004 and then analyzed by Hall Environmental Laboratory. No significant pollutants were detected in these samples. Two years of extensive sampling has occurred. Semi-annual effluent analysis will now be limited to TSS, Total Chromium, BTEX, MTBE Total Nitrate, Total Phosphorous, and Oil and Grease.
3. The 2004 self-audit inspection report was reviewed and the recommendations were addressed. Documentation for ongoing maintenance and other refinery improvements will be in the form of before and after photographs as well as work order printouts.
4. SWPPP 2005 training schedules for Transportation and Refinery personnel were discussed. The video "Environmental Responsibility" will be the main training tool.

Storm Water Pollution Prevention Plan	Year - 2004
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

Date:

12/17/04

Storm Water Pollution Prevention Plan	Year - 2003
Annual Self-Audit Inspection Report	Page 1 of 4

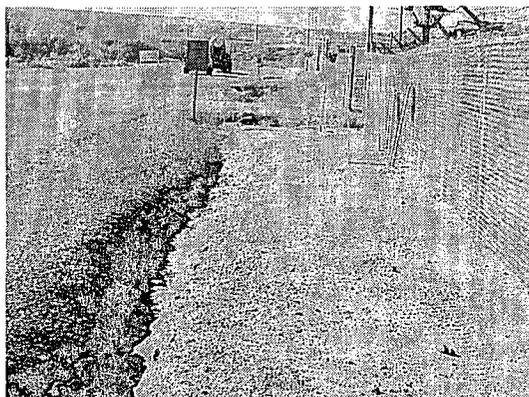
Audit Performed By: **Cindy Hurtado, Environmental Assistant**

Date Performed: **Tuesday, November 18, 2003**

Observations & Findings:

A walking tour and comprehensive visual inspection of the refinery, terminal, and surrounding vicinity was conducted on Tuesday, November 18, 2003. The weather was clear and sunny. Rainfall had been reported during the prior week. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

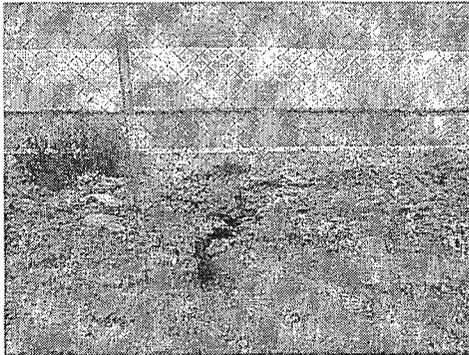
1. The west storage yard was inspected first. Recovery Well #1 was put back into service in August and an earthen berm was built around the container receiving the recovery pump discharge. Totes and 55 gallon drums containing various petroleum and chemical products were observed within the yard and stored properly. The ground surface showed no indication of staining or recent spills. Housekeeping was in good order.
2. The main office, warehouse, and parking areas were visually inspected. No change was observed from the 2002 inspection. No chemical products or outdoor chemical or petroleum storage was observed. The ground surface showed no indication of staining. The side ditch on the north side of County Road 4990 was generally clean, but there was silt build-up at one of the culvert inlets. Storm water effluent from this sector empties into a natural retention area south of County Road 4990. No evidence of staining or odor was detected in this area.



3. The process area was visually inspected. In general, housekeeping was observed to be in good order. Most secondary containment pads were observed to be clean and structurally competent for spill and storm water containment. On the north side of the Aeration Lagoons there is a small

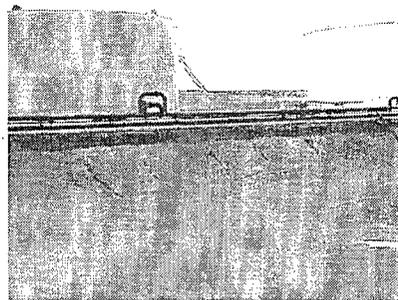
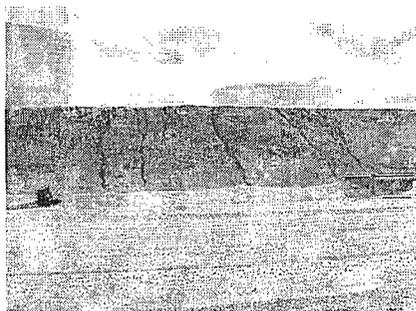
Storm Water Pollution Prevention Plan	Year - 2003
Annual Self-Audit Inspection Report	Page 1 of 4

area of erosion where storm water has escaped to the Hammond Ditch from this area.



Maintenance personnel have done a good job remediating the stained soil at the flare stack that was mentioned in the previous inspection.

4. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 20 inches of freeboard space available. The north sidewall was inspected and found to be structurally competent with no indication of erosion or deterioration.
5. The Tank Farm and ancillary tankage areas were visually inspected. In general, housekeeping was observed to be in good order. Some tankage berms are showing signs of erosion. Stained soil was observed inside the dikes at Tk #28 & Tk #31. Remediation work is in progress.

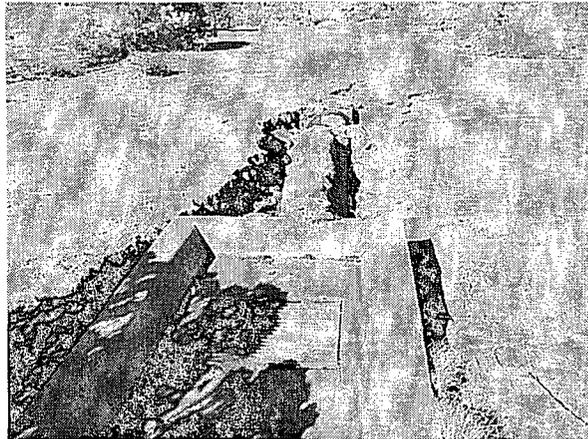
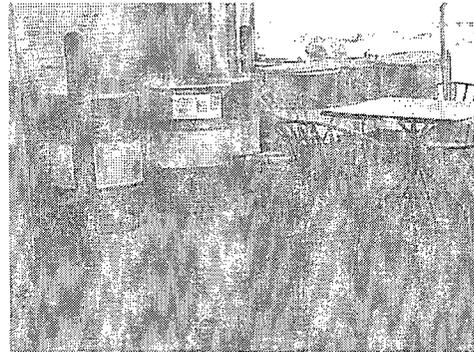
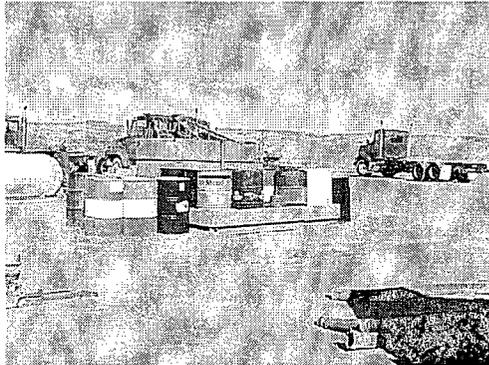


6. The Fire Training Area was visually inspected. Housekeeping was observed to be in good order.
7. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be in good order. No problem areas were identified.

Storm Water Pollution Prevention Plan	Year - 2003
Annual Self-Audit Inspection Report	Page 1 of 4

8. The Terminal Area was visually inspected. Housekeeping was observed to be in good order.

9. The Regional Office, Transportation Maintenance Facility, and associated parking lots were inspected. Fifty-five gallon drums containing various products were observed to be stored outside of containment or without cover. Storm water induced erosion was noted at the drain in the northwest corner of the truck parking lot.



Recommendations:

1. Clean out the culvert located southwest of the Burner Rack on the north side of Sullivan Road.
2. Rebuild the berm along the road on the north side of the Aeration Lagoons.
3. Repair tankage berms throughout the Tank Farm.

Storm Water Pollution Prevention Plan	Year - 2003
Annual Self-Audit Inspection Report	Page 1 of 4

4. Ensure that drums are not stored outside of secondary containment at the Transportation Shop.
5. Repair the erosion damage to the truck parking lot drainage.

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

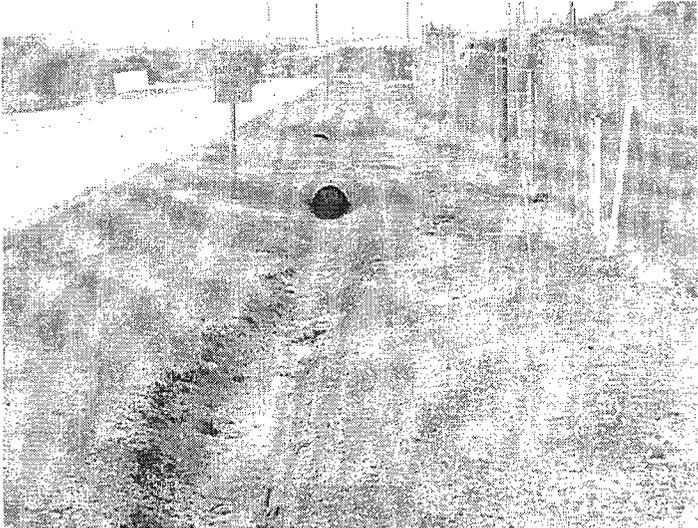
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12/2/03

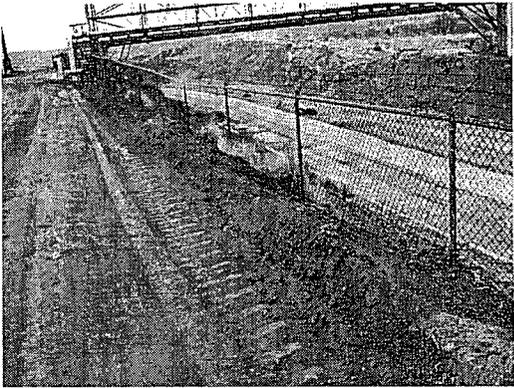
Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	Page 1

Follow up actions to 2003 SWPPP Audit

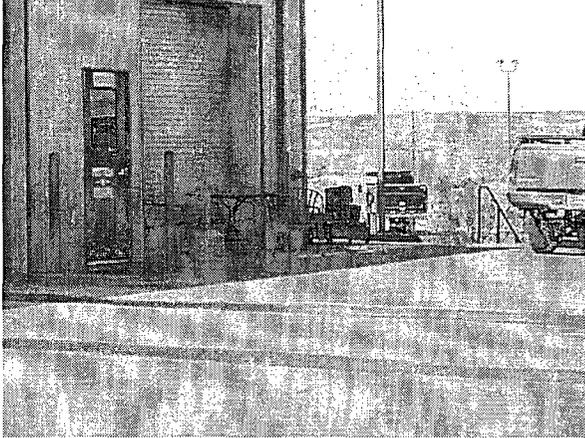
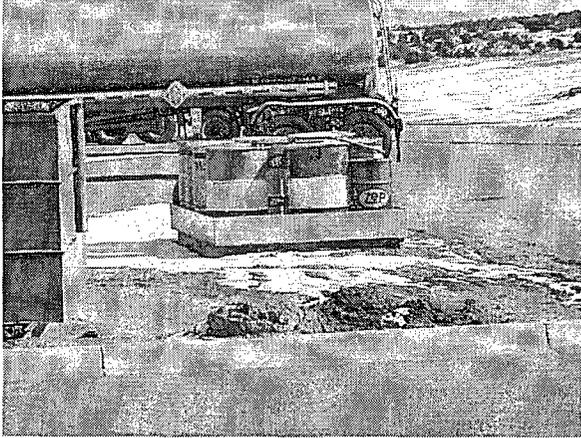
- 1. The culvert southwest of the Burner Rack was cleaned out. Work Order # 62782.



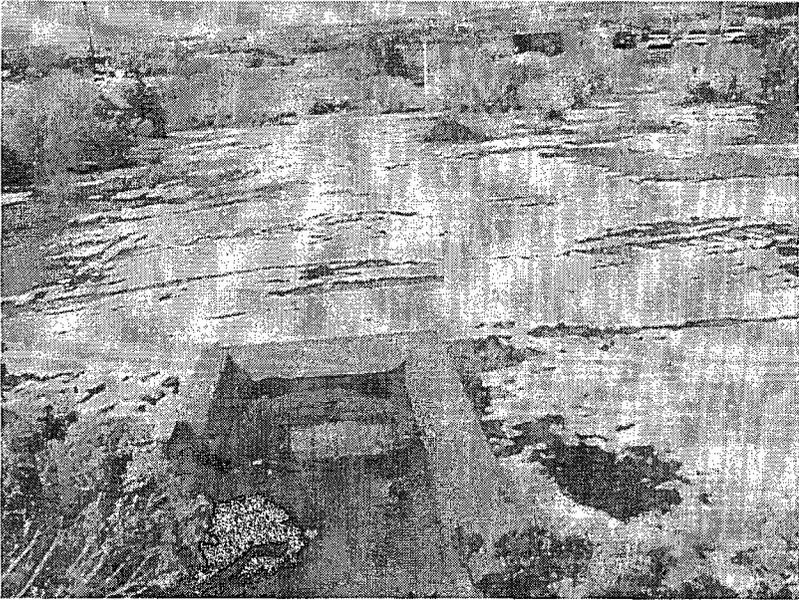
- 2. The berm along the road north of the Aeration Lagoons has been rebuilt. Work Order # 62783.



3. Drums are being stored inside the shop or placed on secondary containment.

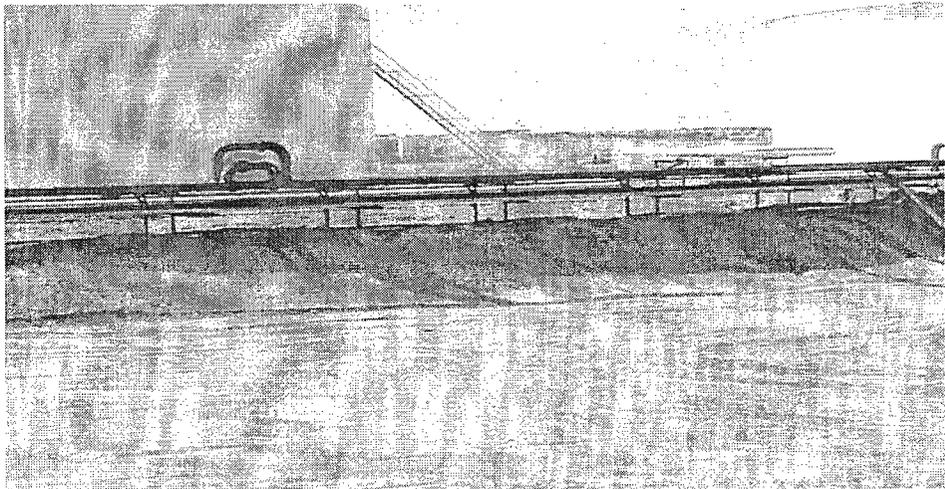
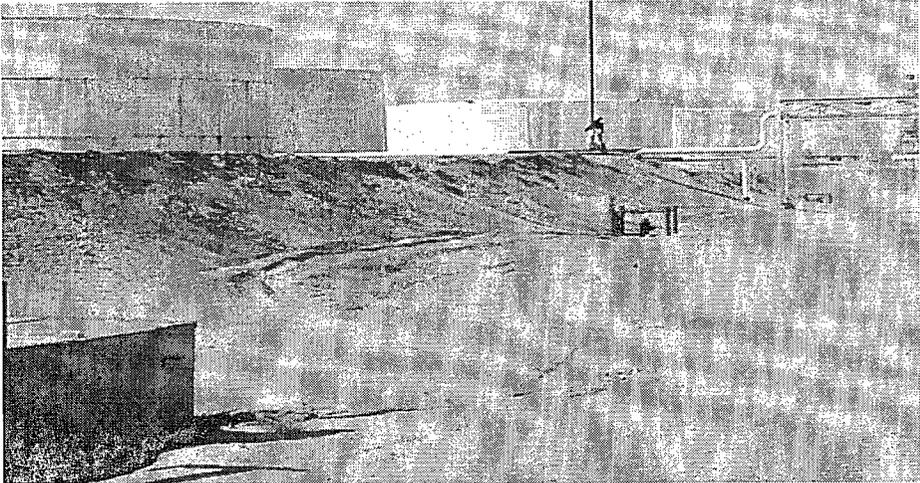


4. Erosion damage has been repaired.



Storm Water Pollution Prevention Plan	Year - 2004
Annual Self-Audit Inspection Report	Page 3

5. Erosion damage on the Tank Farm dikes has been repaired.



Storm Water Pollution Prevention Plan	Year - 2003
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Team Meeting Date: **Tuesday, December 2, 2003 (8:30 AM)**

Team Members Present: **Cindy Hurtado (Team Leader)
Randy Schmaltz (Environmental Supervisor)
Ed Riege (Environmental Superintendent)
Craig Meldrum (Operations Manager)
Jim Stifler (Safety Manager)
Gary Winn (Transportation Facility Manager)
Chad King (Refinery Manager)
Don Wimsatt (Maintenance Manager)**

Meeting Minutes:

A meeting of the SWPPP Team was conducted in order to review the current status of the SWPPP and discuss new information, regulations, inspection reports, changes, revisions, and updating of the plan. Key issues and decisions are summarized below.

1. The Team meeting minutes from 2002 were reviewed and updates made to the SWPPP were noted.
2. The SWPPP Team Member section will be updated to show the current members and associated responsibilities. Randy Schmaltz has replaced Barry Holman as Environmental Supervisor, Ed Riege has replaced Dave Pavlich as Environmental Superintendent.
3. Storm water samples were collected on October 29, 2002 and then analyzed by Pinnacle Laboratories in Albuquerque. No significant pollutants were detected in these samples. Samples were also taken in the first quarter of 2003 and then analyzed by Hall Environmental Laboratory. No significant pollutants were detected in these samples.
4. The 2003 self-audit inspection report was reviewed and the recommendations were addressed. Documentation for ongoing maintenance and other refinery improvements will be in the form of before and after photographs as well as work order printouts.
5. Additional efforts will be made to provide SWPPP training to the Transportation Facility personnel.

Storm Water Pollution Prevention Plan	Year - 2003
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

Date:

12/3/03

Storm Water Pollution Prevention Plan	Year - 2002
Annual Self-Audit Inspection Report	Page 1 of 4

Audit Performed By: **Thomas D. Atwood, P.E.**

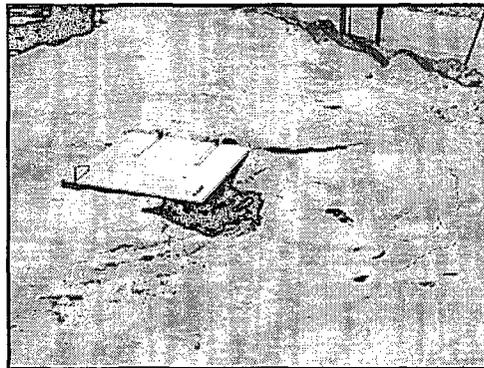
Date Performed: **Friday, October 4, 2002**

Observations & Findings:

A walking tour and comprehensive visual inspection of the refinery, terminal, and surrounding vicinity was conducted on Friday morning, October 4, 2002. The weather was clear and sunny. No rainfall had been reported during the prior week. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

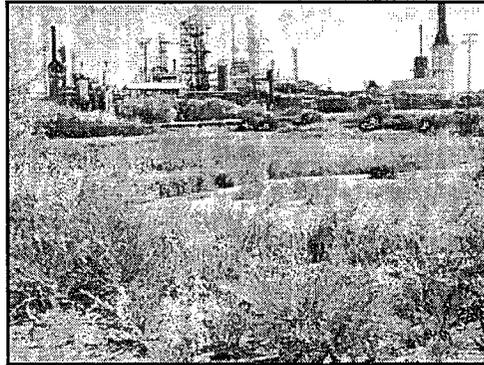
1. The west storage yard was inspected first. No change was observed from the prior 1999 inspection. Totes and 55 gallon drums containing various petroleum and chemical products were observed within the yard and store properly. The ground surface showed no indication of staining or recent spills. Housekeeping was in good order.

Storm water induced erosion was noted near a subsurface valve station located north of the west storage yard. It appears that storm water effluent is tunneling down through the western embankment and then entering the Hammond Ditch.

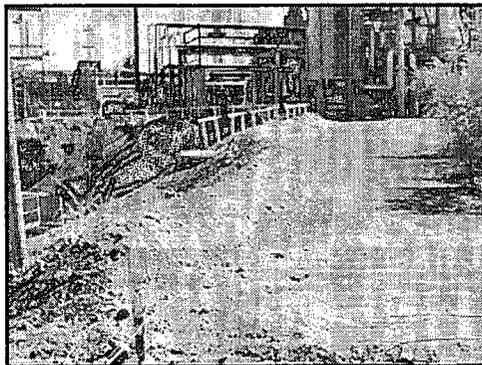


2. The main office, warehouse, and parking areas were visually inspected. No change was observed from the prior 1999 inspection. No chemical products or outdoor chemical or petroleum storage was observed. The ground surface showed no indication of staining. The side ditch on the north side of County Road 4990 was generally clean, but exhibited minor silt build-up at the culvert inlets. Storm water effluent from this sector empties into a natural retention area south of County Road 4990. No evidence of staining or odor was detected in this area.

3. The storm water detention pond located north of the warehouse was inspected and found to be filled with silt and cattail growth, thereby limiting the total detention capacity of this structure.



4. The process area was visually inspected. In general, housekeeping was observed to be in good order. Most secondary containment pads were observed to be clean and structurally competent for spill and storm water containment. As recommended in the 1999 inspection report, a storm water containment berm has now been constructed at the west side of the process area. This berm will prevent storm water from escaping to the Hammond Ditch from this area.

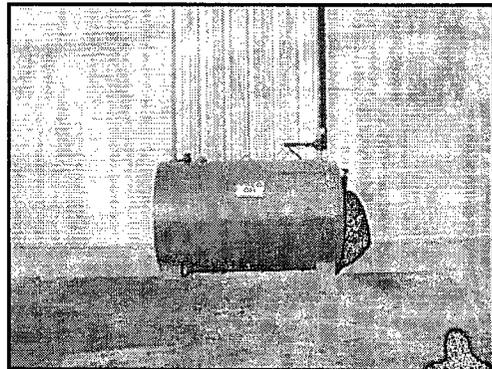
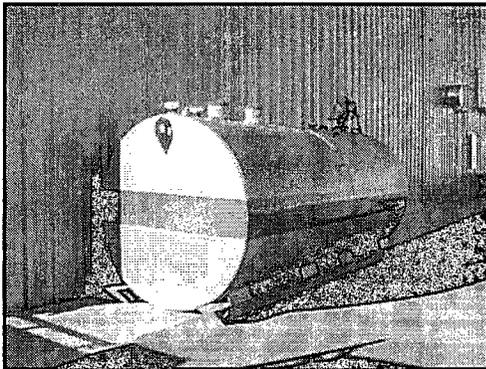


During this inspection, stained soil was once again observed at the base of the flare stack and on associated equipment. This appears to be an area where petroleum leakage is exposed to storm water.

5. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 24 inches of freeboard space available. The north sidewall was inspected and found to be structurally competent with no indication of erosion or deterioration.

Storm Water Pollution Prevention Plan	Year - 2002
Annual Self-Audit Inspection Report	Page 1 of 4

6. The Tank Farm and ancillary tankage areas were visually inspected. In general, housekeeping was observed to be in good order. All tankage berms appeared to be in good condition, with no evidence of significant soil erosion.
7. The Fire Training Area was visually inspected. Housekeeping was observed to be in good order. Minor soil staining was observed in and around the detention pond.
8. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be in good order. No problem areas were identified.
9. The Terminal Area was visually inspected. Housekeeping was observed to be in good order. A new tank was recently installed and includes a secondary containment berm.
10. The Regional Office, Transportation Maintenance Facility, and associated parking lots were inspected. Housekeeping was observed to be in good order. Lubricant and used oil tanks were observed outdoors and did not include secondary containment structures.



Recommendations:

1. Re-direct storm water away from the valve box at the northwest corner of the refinery and into the storm water detention pond.
2. Clean out the storm water detention pond at the northwest corner of the refinery and contour the surrounding area to re-direct storm water into this pond. Additional swales and culverts may also be needed for this purpose.

Storm Water Pollution Prevention Plan	Year - 2002
Annual Self-Audit Inspection Report	Page 1 of 4

3. Evaluate installing a storm water collection system for the flare stack area that includes a connection to the refinery wastewater treatment system.
4. Increase the overall size and berm height of the storm water detention pond located west of the used equipment laydown area.
5. Ensure that solid waste stored at the east yard of the refinery is promptly covered.
6. Install secondary containment curbing (or equivalent) around the oil tanks sitting outside by the Transportation Maintenance Facility building.

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

Date:

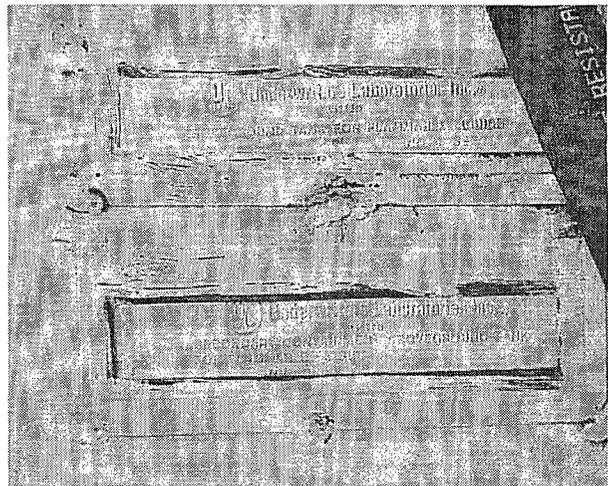
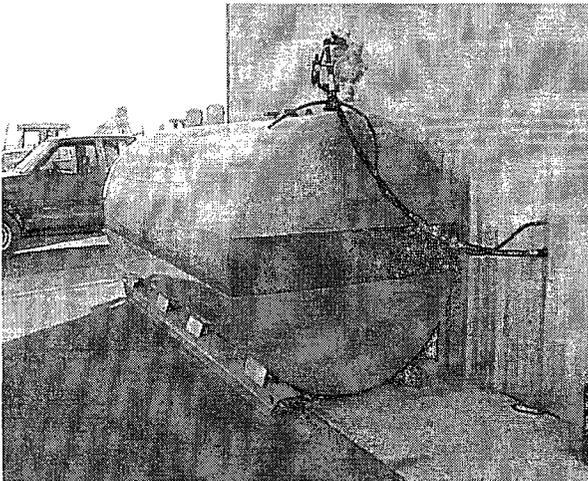
12/20/02

Follow up actions to 2002 SWPPP Audit

1. Erosion at the valve box was repaired as shown on the photograph below..

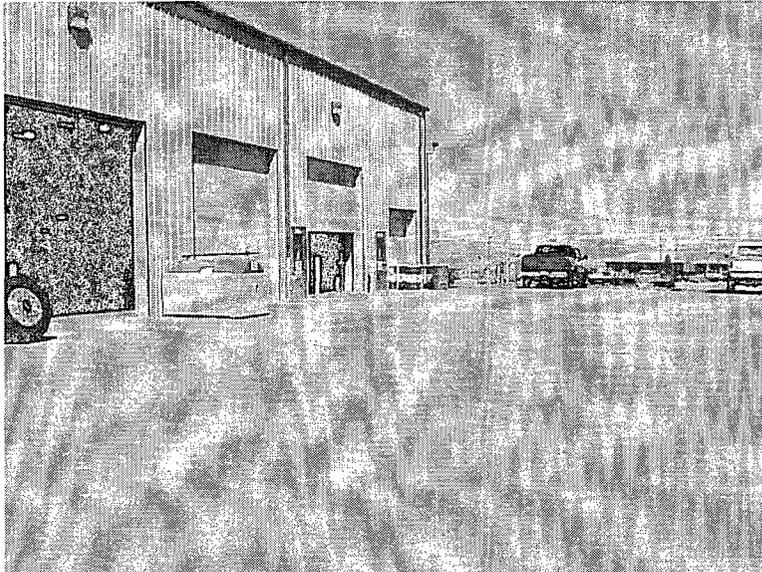
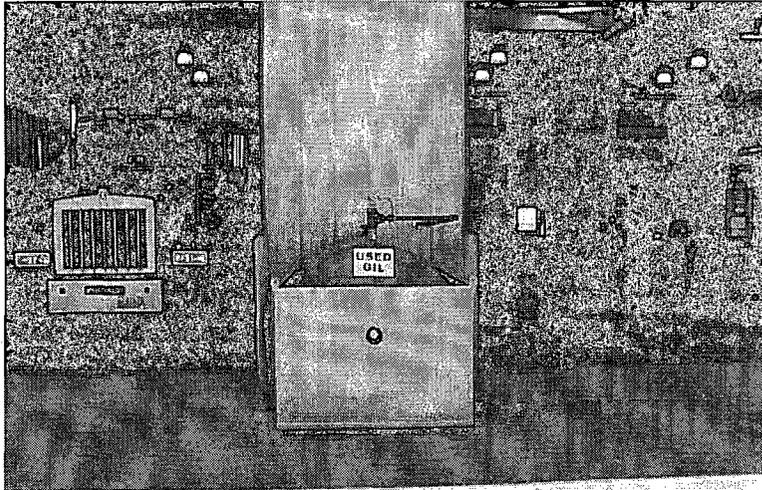


2. A new earthen berm was built up near the boneyard area.
3. Maintenance Department has become more vigilant on covering up solid waste.
4. New oil container is double-walled which qualifies as secondary containment.



Storm Water Pollution Prevention Plan	Year - 2003
Annual Self-Audit Inspection Report	Page 1 of 3

5. Secondary containment was established around the Used Oil Container at the Truck Shop.



Storm Water Pollution Prevention Plan	Year - 2002
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

Team Meeting Date: **Friday, October 4, 2002 (10:00 a.m.)**

Team Members Present: **Cindy Hurtado (Team Leader)
Craig Meldrum (Operations Manager)
Jim Stifler (Safety Manager)
Gary Winn (Transportation Facility Manager)
Chad King (Refinery Manager)
Tom Atwood (Visiting Consultant)**

Meeting Minutes:

A meeting of the SWPPP Team was conducted in order to review the current status of the SWPPP and discuss new information, regulations, inspection reports, changes, revisions, and updating of the plan. Key issues and decisions are summarized below.

1. The MSGP 1995 permit has expired and the refinery is now covered under the new MSGP 2000 permit, which includes new provisions and requirements for storm water compliance activities.
2. Richard Powell (NMED Surface Water Quality Bureau) inspected the refinery on May 29, 2002 and then issued a compliance assessment report on September 4, 2002. His report recommended several areas of improvement.
3. An NOI form for the MSGP 2000 permit will be signed by Chad King and then sent to the EPA. This will replace the NOI form signed by Barry Holman.
4. The SWPPP written documentation will be updated this month to incorporate recommended changes and revisions.
5. The SWPPP Team Member section will be updated to show the current members and associated responsibilities. Cindy Hurtado has replaced Barry Holman, Chad King has replaced John Stokes, and Gary Winn has been added to the team and represents the Transportation Maintenance Facilities.
6. The SWPPP will be augmented to include the Regional Office Building, the Transportation Maintenance Facility, and the associated parking lots.
7. The SWPPP site map will be updated to include additional information regarding identification of significant materials, drainage areas, prior spill locations, storm water controls, and potential storm water pollutants.

Storm Water Pollution Prevention Plan	Year - 2002
Minutes of Annual SWPPP Team Meeting	Page 1 of 2

8. Giant will begin conducting the quarterly visual inspections of stormwater samples. A new documentation form will be used for this purpose and records will be kept in the notebook in Cindy Hurtado's office.
9. Two storm water samples were collected on September 11, 2002 and then analyzed by Pinnacle Laboratories in Albuquerque. No significant pollutants were detected in these samples.
10. Additional efforts will be made to document ongoing maintenance and other refinery improvements that promote storm water pollution prevention. For example, we will occasionally take before and after photographs of culvert clean-out and berm repair activities.
11. Cooling tower mist emissions will now be listed as a non storm water discharge source. Cooling tower make-up water treatment chemicals will be reviewed to ensure no significant impact to the environment from this release. Note: the refinery does not use chromate-base water treatment chemicals. Flushing water from the annual clean-out of the firewater distribution system shall be contained in on-site detention ponds. Therefore, this flushing water will not become a non storm water discharge.
12. There are now five stormwater outfall locations at the refinery. Three are located at the southwestern property boundary, south of County Road 4990 and east of the Hammond Ditch. One is located north of the Hammond Ditch and adjacent to the service road. One is located in the south side ditch on County Road 4990 at the eastern boundary of the property.
13. All future self-audit inspection reports will be promptly reviewed by and signed by the refinery manager.

Reviewed by:

Chad King

Name/Title:

Chad King, Refinery Manager

Date:

12/20/02

SUBJECT: 2000 SWPPP WALK AROUND AUDIT

DATE: JULY 7, 2000

TO: SWPPP FILE

FROM: BARRY HOLMAN

A walking tour and comprehensive visual inspection of the refinery, terminal, and surrounding vicinity was conducted on Friday July 7, 2000. The weather was clear and sunny. No rainfall had been reported during the prior week. All ground surfaces, equipment, berms storm water structures and controls were plainly visible.

1. The warehouse storage yard was inspected first, all totes and 55 gallon drums were observed on concrete containment areas. The 55-gallon drums were observed with a roof that protected the drums from sunlight and rain. The gasoline tank is also in the warehouse yard and is totally contained with a concrete floor and a cement block wall on all four sides. The topography of the yard is such that storm water falling outside of containment areas will flow to the southeast and be trapped by the drum shed containment wall. No spills are known to have occurred in the yard over the past 8 months or since the last inspection. Housekeeping is in good order.
2. The main office, warehouse, and parking areas were visually inspected. There is no product storage in these areas. The ground surface was in good shape and the housekeeping is in order. The ditch that runs along the front of the refinery was in good shape with no staining.
3. The process area was visually inspected. The housekeeping in these areas appears to be good. Some staining in the areas listed has been put on a remediation list and is viewed weekly and the impacted soil is worked on a monthly basis. 1. The flare stack has some staining. 2. Under the main column on the south side is an area that needs attention and is on the remediation list. 3. All containment areas appear to be in good order.
4. The Waste Water Treatment Unit was visually inspected and is in good working order. The holding and aeration basins were in operation and appeared to have at least 32 inches of freeboard. All concrete containment areas were in good shape with no visible signs of failure.

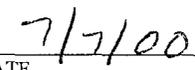
5. The Tank farms were visually inspected and appear to be in good order, the housekeeping in these areas are in good shape. All containment structures are in good shape with little or no erosion. There are a few areas that need attention due to some slight staining but these are confined to the contained areas with no drains observed.
6. The Fire training ground was visually inspected and is in good order. Housekeeping in this area is good with all containment berms in good shape.
7. The roads, pipe rack alleys, and other areas of the refinery were visually inspected. The housekeeping in these areas is good no erosion in any area with secondary containment.
8. The evaporation ponds were visually inspected. Both ponds appeared to have about 2 foot of water with about 3 foot of freeboard. Some erosion was noted on the south side of the south pond and will need to be addressed by the year 2002.
9. The Terminal area was visually inspected. In general, housekeeping was observed to be in good order. Some minor soil staining was evident in the vicinity of the crude oil unloading rack, and the crude oil storage tanks.

RECOMMENDATIONS

1. Continue with remediation of impacted soils within the tank farm, process areas and the flare. The flare sump pump has been replaced and no spills have occurred since this event.
2. By the end of year 2002 we should plan to work on erosion at the south evaporation pond. This will be the North outside wall.



INSPECTOR'S SIGNATURE



DATE

SUBJECT: 2001 SWPPP WALK AROUND AUDIT

DATE: JUNE 12, 2001

TO: SWPPP FILE

FROM: BARRY HOLMAN

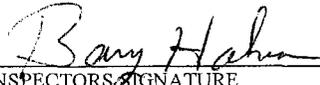
A walking tour and comprehensive visual inspection of the refinery, terminal, and surrounding vicinity was conducted on Tuesday June 12, 2001. The weather was partly cloudy with some sun. No rainfall had been reported during the prior week. All ground surfaces, equipment, berms storm water structures and controls were plainly visible.

1. The warehouse storage yard was inspected first, all totes and 55 gallon drums were observed on concrete containment areas. The 55-gallon drums were observed with a roof that protected the drums from sunlight and rain. The gasoline tank is also in the warehouse yard and is totally contained with a concrete floor and a cement block wall on all four sides. The topography of the yard is such that storm water falling outside of containment areas will flow to the southeast and be trapped by the drum shed containment wall. No spills are known to have occurred in the yard over the past 11 months or since the last inspection. Housekeeping is in good order.
2. The main office, warehouse, and parking areas were visually inspected. There is no product storage in these areas. The ground surface was in good shape and the housekeeping is in order. The ditch that runs along the front of the refinery was in good shape with no staining.
3. The process area was visually inspected. The housekeeping in these areas appears to be good. Some staining in the areas listed has been put on a remediation list and is viewed weekly and the impacted soil is worked on a monthly basis. 1. The flare stack has some staining. 2. Under the main column on the south side is an area that needs attention and is on the remediation list. All containment areas appear to be in good order.
4. The Waste Water Treatment Unit was visually inspected and is in good working order. The holding and aeration basins were in operation and appeared to have at least 24 inches of freeboard. All concrete containment areas were in good shape with no visible signs of failure.

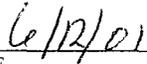
5. The Tank farms were visually inspected and appear to be in good order, the housekeeping in these areas are in good shape. All containment structures are in good shape with little or no erosion. There are a few areas that need attention due to some slight staining but these are confined to the contained areas with no drains observed.
6. The Fire training ground was visually inspected and is in good order. Housekeeping in this area is good. Some staining was noted in the holding area or drainage area. All containment areas were in good working order.
7. The roads, pipe rack alleys, and other areas of the refinery were visually inspected. The housekeeping in these areas is good no erosion in any area with secondary containment.
8. The evaporation ponds were visually inspected. Only one of the two pond was in service. The north pond was empty while the south pond had 3 foot with 2 foot of freeboard. As noted in the 2000 inspection the erosion on the north wall of the south pond will be in need of some attention in 2002.
9. The Terminal area was visually inspected. In general, housekeeping was observed to be in good order. No visible signs of contamination was noted at the unloading area or the crude oil holding tanks.

RECOMMENDATIONS

1. Continue with remediation of impacted soils within the tank farm, process areas and the flare. The flare sump pump has been replaced and no spills have occurred since this event.
2. As reported in the 2000 report, we should plan to work on erosion at the south evaporation pond north wall in 2002.
3. Containment area at the fire training ground needs attention. Soil is stained in that area.



INSPECTOR'S SIGNATURE



DATE

Storm Water Pollution Prevention Plan	Year - 1999
Annual Self-Audit Inspection Report	Page 1 of 3

Audit Performed By: **Thomas D. Atwood, P.E.**

Date Performed: **Friday, November 19, 1999**

Observations & Findings:

A walking tour and comprehensive visual inspection of the refinery, terminal, and surrounding vicinity was conducted on Friday morning, November 19, 1999. The weather was clear and sunny. No rainfall had been reported during the prior week. All ground surfaces, equipment, berms, storm water structures and controls were plainly visible.

1. The west storage yard was inspected first. Totes and 55 gallon drums containing various chemical products were observed within the yard. Totes were observed on a curbed, concrete containment pad. Drums were observed within an "L" shaped, elongated shed. The base of the shed consists of a concrete containment basin and the drums are elevated above the floor by a bar support. The shed is covered by a roof and side wall. A gasoline tank and refueling pump are also located in the yard. Both the tank and pump are located within a high-walled concrete containment basin. The topography of the yard is such that storm water falling outside of containment areas will flow to the southeast and be trapped by the drum shed containment wall. No spills are known to have occurred in the yard. The ground surface showed no indication of staining. Housekeeping was in good order.
2. The main office, warehouse, and parking areas were visually inspected. No chemical products or outdoor chemical or petroleum storage was observed. The parking areas were observed to be in normal automobile use. The ground surface showed no indication of staining. The side ditch on the north side of County Road 4990 was clean and unobstructed.
3. The process area was visually inspected. In general, housekeeping was observed to be in good order. Most secondary containment pads were observed to be clean and structurally competent for spill and storm water containment. In a few areas, containment pads were deteriorated or lacked curbing. At the west side of the process area, a heater labeled as H-404 lacks adequate containment and it appears that a major leak in this equipment could potentially migrate to the Hammond Irrigation Ditch. Stained soil was observed at the base of the flare stack. It appears that this area is also a low collection point for unconfined run-off originating in the western part of the refinery.
4. The WWTU was visually inspected. Housekeeping was observed to be in good order. The holding and aeration basins were in operation and appeared to have at least 18 inches of freeboard space available. The north sidewall was inspected and found to be structurally competent with no indication of erosion or deterioration.

Storm Water Pollution Prevention Plan	Year - 1999
Annual Self-Audit Inspection Report	Page 1 of 3

5. The Tank Farm and ancillary tankage areas were visually inspected. In general, housekeeping was observed to be in good order. All petroleum and chemical storage tanks were found to be within secondary containment berms or concrete basins. In general, the earthen berms were found to be structurally competent; however, in a few isolated areas, these berms showed indications of soil erosion. No drains were observed within the bermed areas.
6. The Fire Training Area was visually inspected. Housekeeping was observed to be in good order. Minor soil staining was observed in vicinity of fire training equipment. A shallow earthen berm has been constructed on the east and west sides of this area in order to control run-on and run-off. The area drains to Detention Pond No. 3, which was dry at the time of inspection. No indication of staining was present on the floor of the pond.
7. The roads, piperack alleys, and other unclassified areas of the refinery were visually inspected. In general, housekeeping was observed to be in good order. Fueling stations consisting of elevated fuel drums (gasoline and diesel) were noted in several areas. All were found to be within secondary containment basins. The burner fuel load-out rack appears to lack adequate curbing to control storm water run-on or run-off.
8. The process wastewater holding ponds were visually inspected. The north pond was empty at the time of inspection. The south pond was partially full and appeared to have at least 3 feet of freeboard space available. Housekeeping was observed to be in good order. The area impacted by the 1998 wastewater spill was also inspected. No soil staining or other indication of contamination was evident. Berms and sidewalls were found to be structurally competent; however, minor soil erosion was evident in several areas.
9. The Terminal Area was visually inspected. In general, housekeeping was observed to be in good order. Minor soil staining was evident in the vicinity of the crude oil unloading rack, the product load-out rack, and the crude oil storage tanks.

Recommendations:

1. Stained soil at the base of the flare stack should be cleaned up. The source of this leakage should be investigated and corrected, if feasible.

The base of the flare stack is located at a low collection point for unconfined storm water originating in the western section of the refinery. Because this run-off may come into contact with leakage at the flare stack, the storm water should be either diverted from flowing into this area or contained or recovered in order to prevent an overflow into the Hammond Irrigation Ditch.

Storm Water Pollution Prevention Plan	Year - 1999
Annual Self-Audit Inspection Report	Page 1 of 3

2. Unconfined storm water may also come into contact with potential leakage in the vicinity of H-404 at the northwestern edge of the process area. If so, a containment structure and extension of the process sewer should be evaluated for this area.
3. Significant soil erosion was noted on the side walls of earthen berms in several locations within the tank farm, along the north and east faces of the raw water holding pond, and at the process wastewater holding ponds. These berms should be repaired.
4. At the fire training area, the earthen berms that form the detention pond at the north end of this sector should be built up and thickened in order to ensure containment.
5. At the crude oil unloading station and the product load-out station, the earthen pits that provide containment for storm water run-off should be built up and thickened in order to ensure containment.

Storm Water Pollution Prevention Plan	Year - 1999
Annual Self-Audit Inspection Report	Page 1 of 3

Follow up actions to 1999 SWPPP Audit

1. Flare stack area soil was remediated in place during the past year. The flare sump float control system is included on a periodic preventive maintenance schedule.
2. A new earthen berm was installed between H-404 and the Hammond Ditch.
3. Berms were repaired throughout the Tank Farm.
4. Berms were built up in the fire training ground.

WO # 71861 There is break in the stormwater dike located west of the boneyard

Location ENVIRON Environmental Loc/Eq Pri WO Pri 0

Equip # Is Equip Up? Scheduled 1st Out

Reported By CHURTADO Reported Date 2005-10-19-14.44.00 Supervisor Appr Ops Appr

Status COMP Status Date 2005-10-27-10.41.00 Charge to Store? N Work Type RO

L Acct # 2164060.??????? RFE? RFE # Warranty Date

Comments

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan	Failure Class	Supervisor SDEARING	TA Date
Safety Plan	Problem Code	Lead Craft GM	Special Sort
PM	Follow-up Work	Order Plan Materials!	Additional Tracking Info
Service Con	Originating WO	Eng Assigned	Drwg Req'd <input type="checkbox"/> Drwg Comp <input type="checkbox"/>
	Has Follow-up Work? N		Welder Req'd <input type="checkbox"/> Fab Comp <input type="checkbox"/>

Scheduling Information			Additional Tracking Info	
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Scheduled		Estimated Duration 0:00	Matts Ordered <input type="checkbox"/> Matt's Rec'd <input type="checkbox"/>	
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Date WO Pulled for Re-Schedule	Interruptible? <input type="checkbox"/>	Crew	Modified	
			By DWALTERS	
			Date 2005-10-27-10.41.00	

LDAR Information

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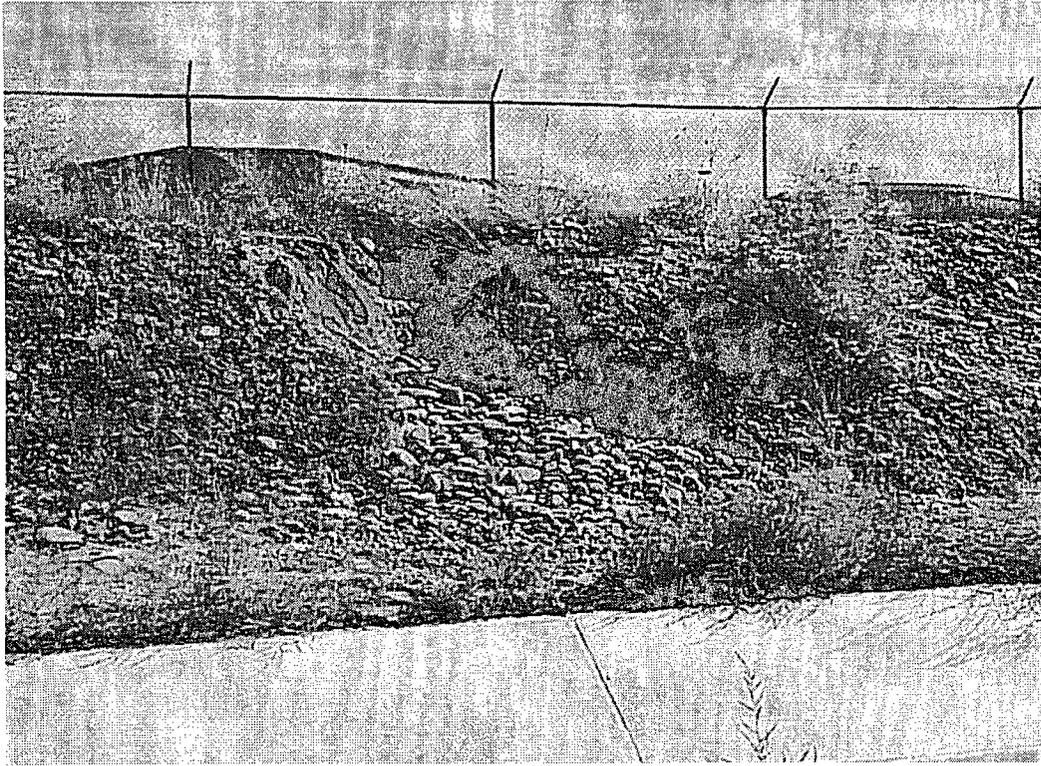
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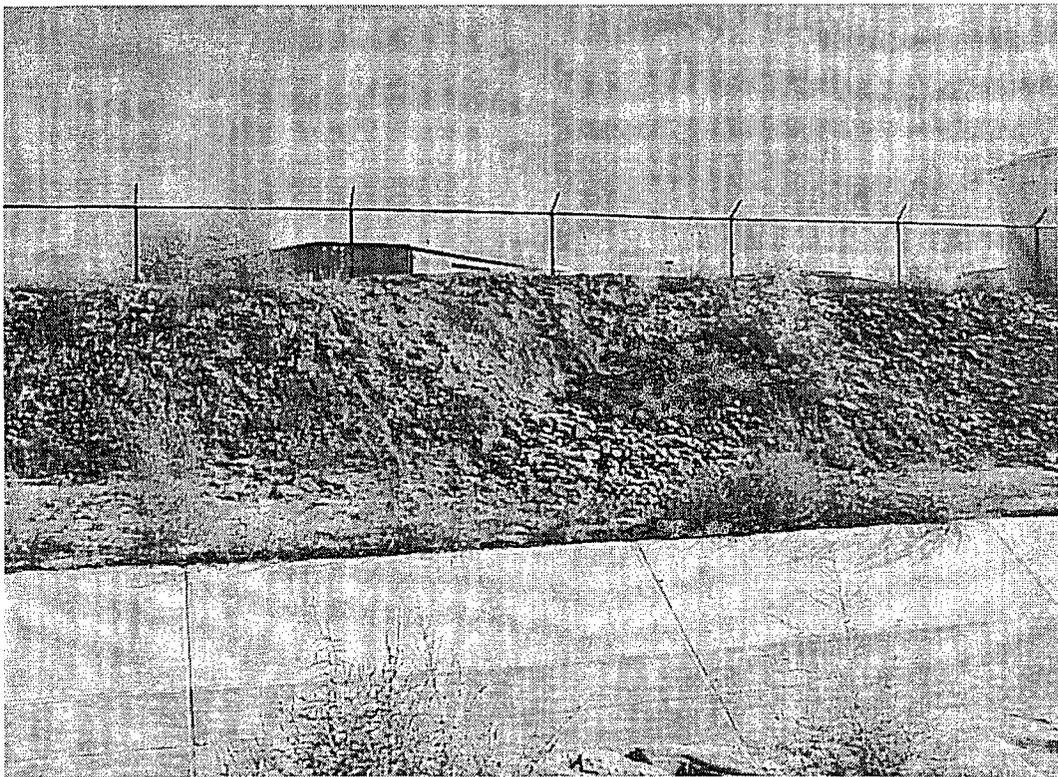
Comments

Comments2

West of Boneyard WO#71861



Completed Work Order



WO # 71862 Stormwater Outfall #1 located southeast of the contractors parking lot has significant erosion.

Location ENVIRON Environmental Loc/Eq Pri WO Pri 0

Equip # Is Equip Up? Scheduled 1st Out

Reported By CHURTADO Reported Date 2005-10-19-14.48.00 Supervisor Appr Ops Appr

Status COMP Status Date 2005-10-27-10.41.00 Charge to Store? N Work Type ENV

Acct # 2164060.??????? RFE? RFE # Warranty Date

Comments

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan	Failure Class	Supervisor SDEARING	TA Date
Safety Plan	Problem Code	Lead Craft GM	Special Sort
PM	Follow-up Work	Order Plan Materials!	Additional Tracking Info
Service Con	Originating WO	Eng Assigned	Drwg Req'd <input type="checkbox"/> Drwg Comp <input type="checkbox"/>
	Has Follow-up Work? N		Welder Req'd <input type="checkbox"/> Fab Comp <input type="checkbox"/>
Scheduling Information			Matl's Ordered <input type="checkbox"/> Matl's Rec'd <input type="checkbox"/>
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Scheduled			By DWALTERS
Actual 2005-10-20-10.04.00	2005-10-27-10.41.00		Date 2005-10-27-10.41.00
Date WO Pulled for Re-Schedule	Interruptible? <input type="checkbox"/>	Crew	

LDAR Information

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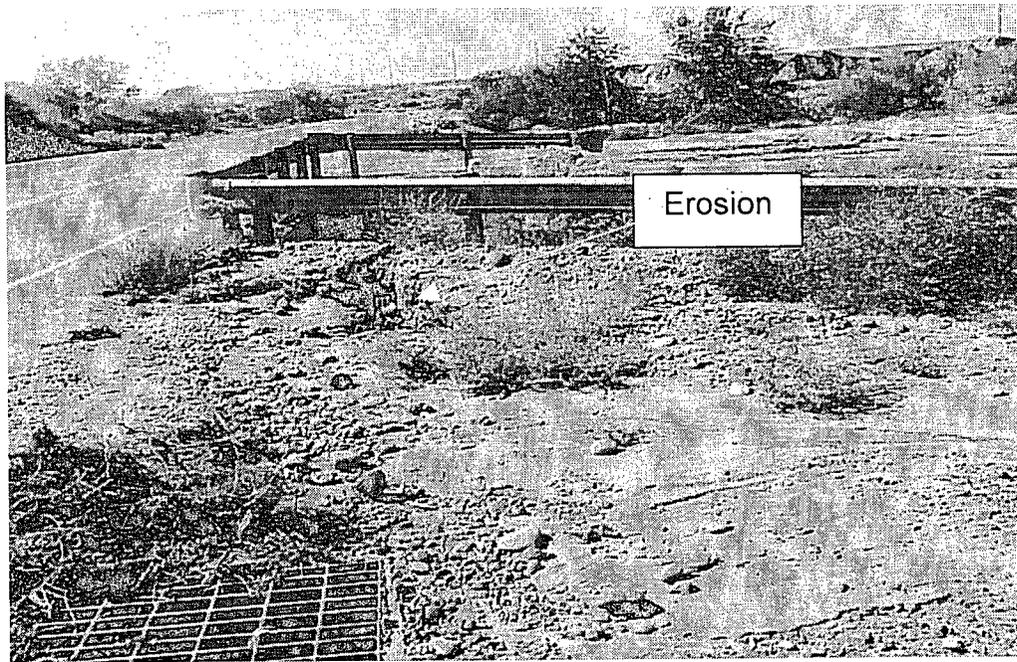
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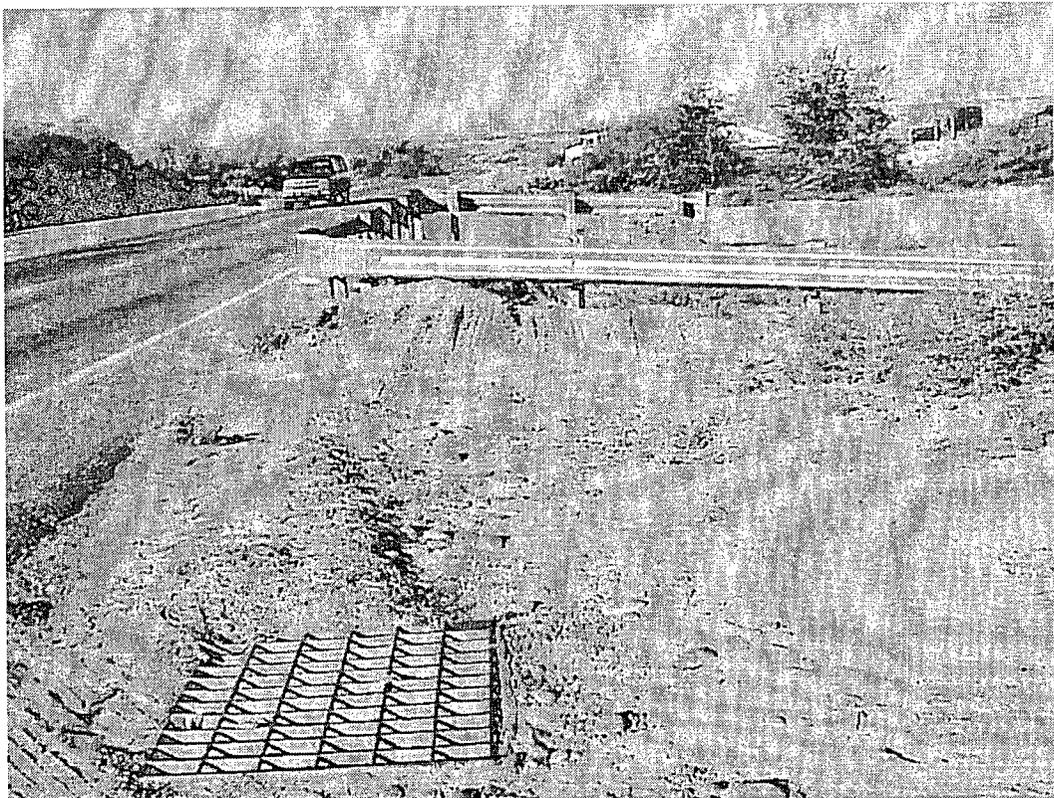
Comments

Comments2

Stormwater Outfall #1 – WO #71862



Completed Work Order



WO # 23156 Clean out sump at fire training grounds

Location SAFETY SAFETY SYSTEMS Loc/Eq Pri [] WO Pri 0

Equip # [] Is Equip Up? [] Scheduled 1st Out []

Reported By RSCHMALTZ Reported Date 2003-12-30-14.09.00 Supervisor Appr [] Ops Appr []

Status COMP Status Date 2004-03-25-10.34.00 Charge to Store? N Work Type RO

Act # 2164070.??????? RFE? [] RFE # [] Warranty Date []

Comments 2-25-04 bl til 3-4-04

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan []	Failure Class []	Supervisor MRUTTER	TA Date []
Safety Plan []	Problem Code []	Lead Craft GM	Special Sort []
PM []	Follow-up Work	Order Plan Materials! []	Additional Tracking Info
Service Con []	Originating WO []	Eng Assigned []	Drwg Req'd [] Drwg Comp []
	Has Follow-up Work? N		Welder Req'd [] Fab Comp []
Scheduling Information			Matls Ordered [] Matl's Rec'd []
Target 2004-03-16-0.00.00	Completion []	Remaining Duration []	MOC Written [] MOC []
Scheduled []	[]	Estimated Duration 0:00	
Actual 2004-03-15-11.13.00	2004-03-25-10.34.00		Modified
Date WO Pulled for Re-Schedule []	Interruptible? []	Crew []	By DWALTERS
			Date 2004-03-25-10.34.00

LDAR Information

LDAR Tag # [] Leak Source []

1st Attempt Date [] 1st Monitor ppm []

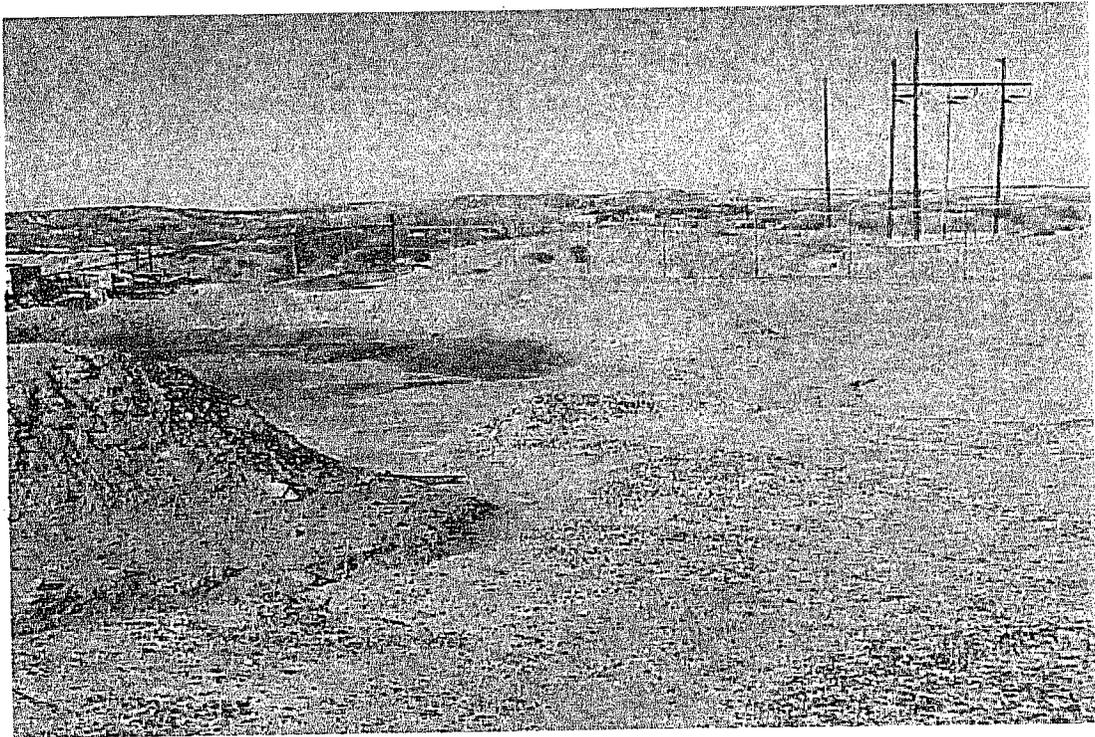
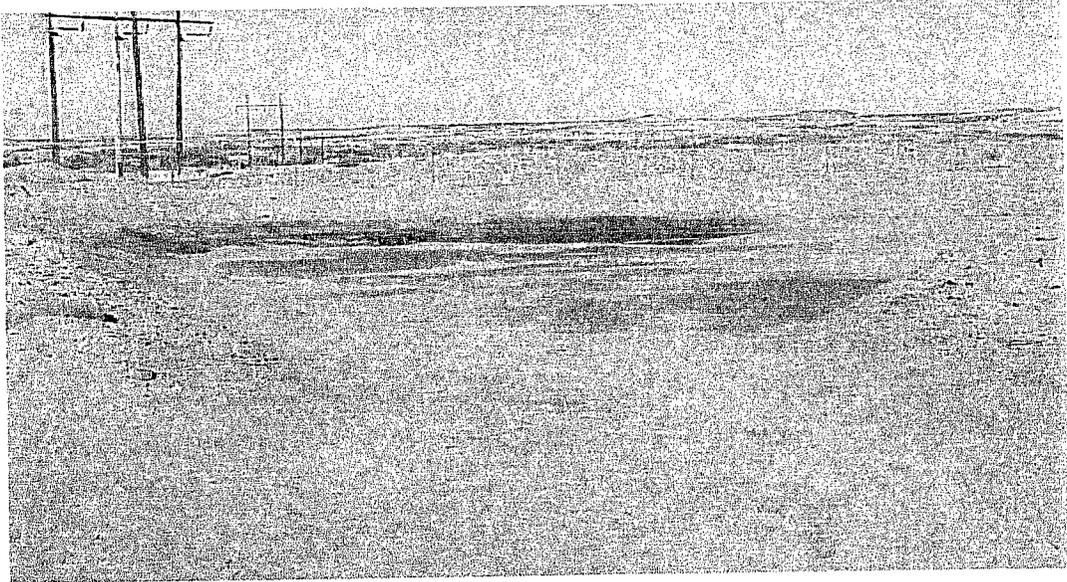
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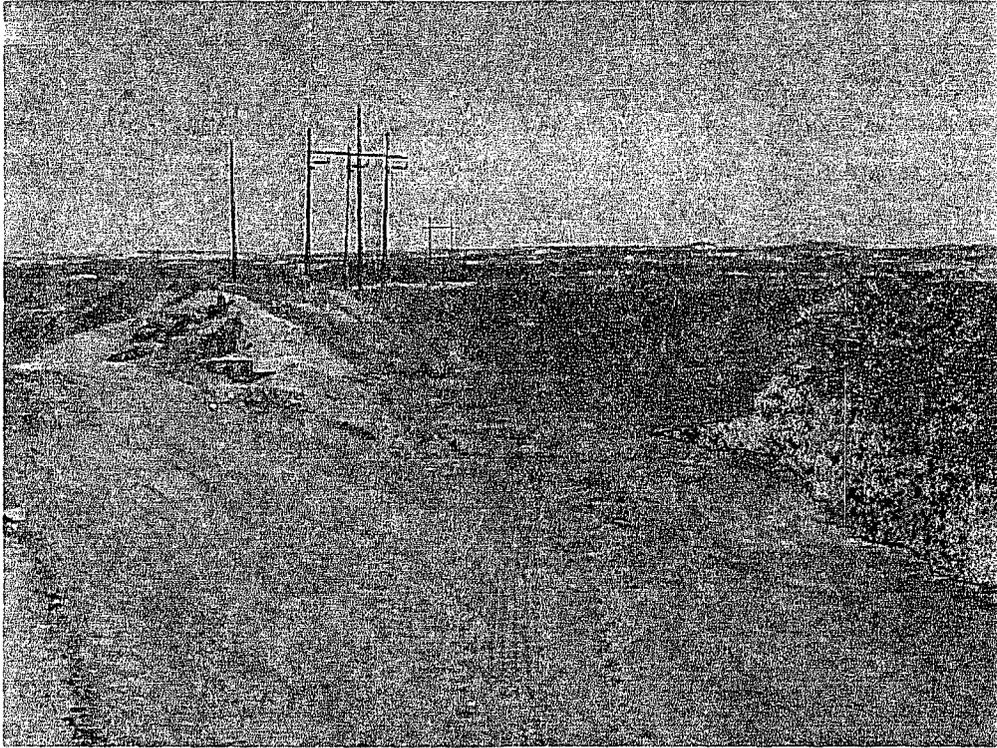
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FIRE TRAINING GROUNDS CONTAINMENT SUMP

Work Order #63156

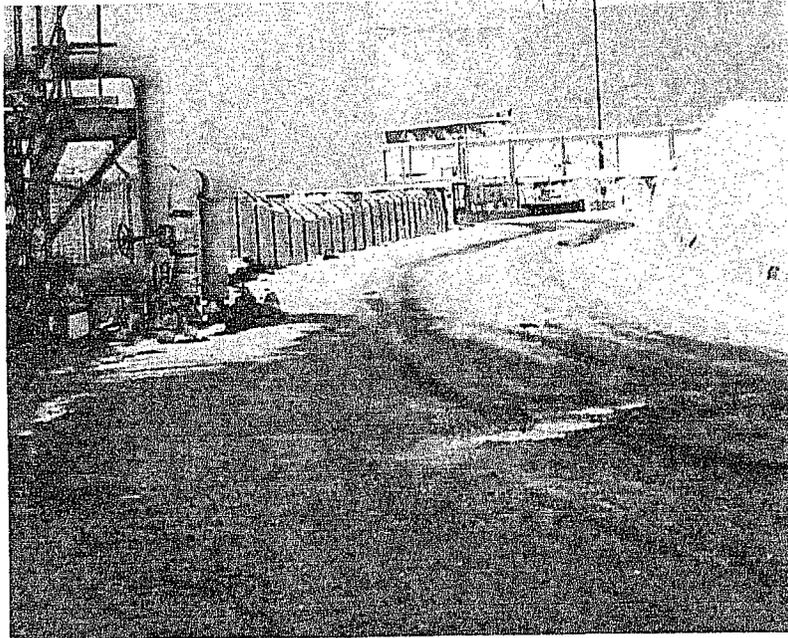


COMPLETED WORK ORDER

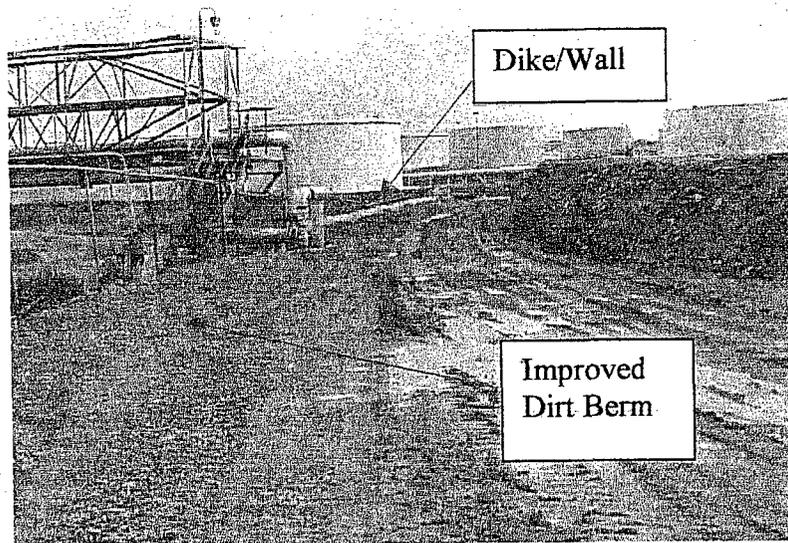


STORM WATER DIKING & DIVERSION PROJECT
RFE #00216-CB903186
COMPLETED 12/29/04

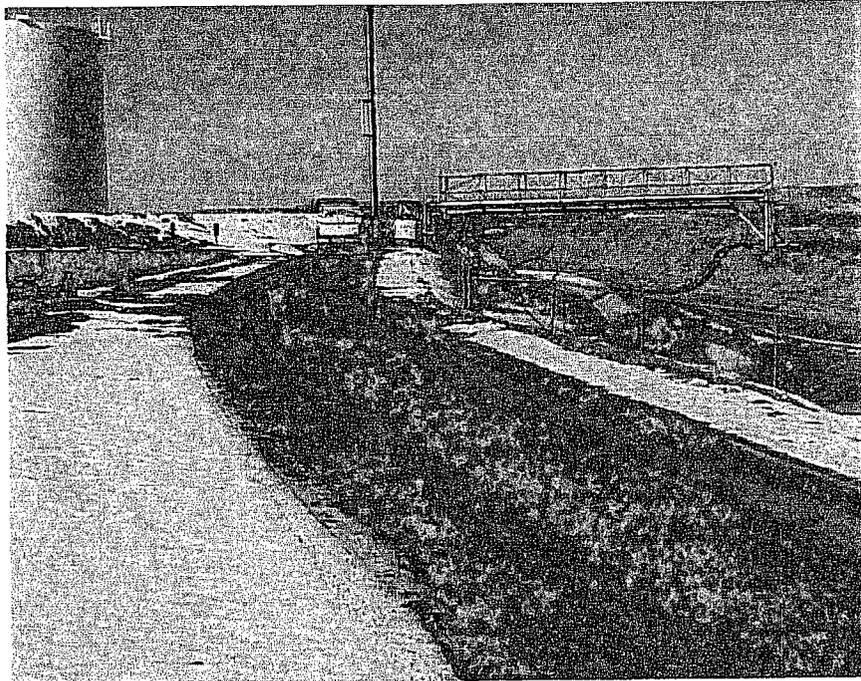
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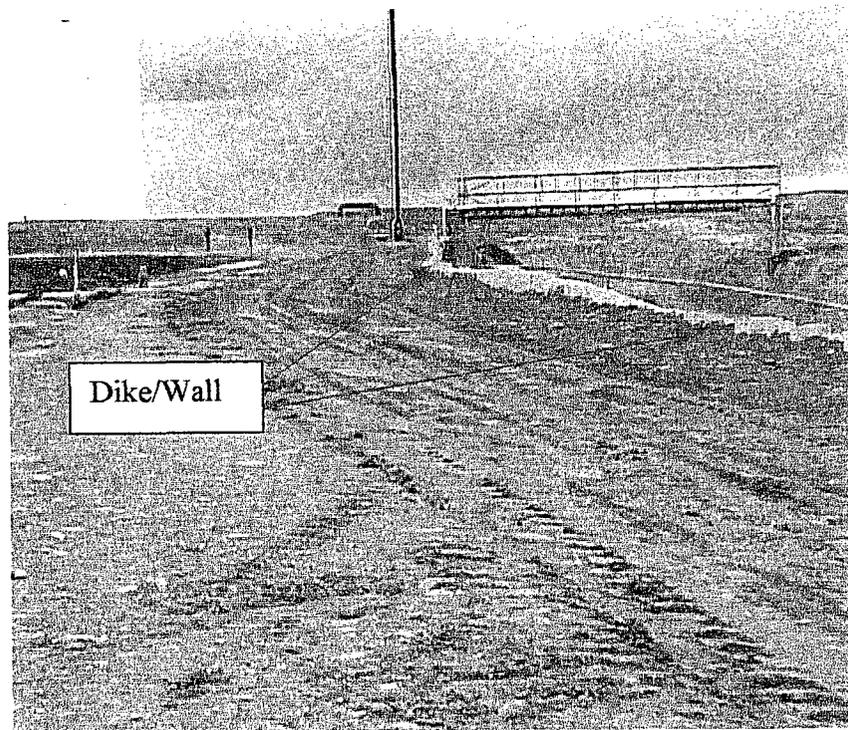
2. After Instillation of the Dike



1. Before the Project – Looking West to the Flare



2. After Installation of the Dike



WO # 54767 Install concrete pad with curb on south side of V105 & V106 for chemical relocation

Location BLMFD Bloomfield Refining Company Loc/Eq Pri WO Pri 0

Equip # Is Equip Up? Scheduled 1st Out

Reported By CCUNNINGHAM Reported Date 2004-05-04-9.56.00 Supervisor Appr Ops Appr

Status COMP Status Date 2004-05-10-11.46.00 Charge to Store? N Work Type ENV

ct # 2169970.9400.34 RFE? RFE # Warranty Date

Comments

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan	Failure Class	Supervisor BLUCERO	TA Date
Safety Plan	Problem Code	Lead Craft CON	Special Sort
PM	Follow-up Work	Order Plan Materials!	Additional Tracking Info
Service Con	Originating WO	Eng Assigned	Drwg Req'd <input type="checkbox"/> Drwg Comp <input type="checkbox"/>
	Has Follow-up Work? N		Welder Req'd <input type="checkbox"/> Fab Comp <input type="checkbox"/>
Scheduling Information			Mats Ordered <input type="checkbox"/> Mat's Rec'd <input type="checkbox"/>
Target Start 2004-05-05-0.00.00	Completion	Remaining Duration	MOC Written <input type="checkbox"/> MOC <input type="checkbox"/>
Scheduled		Estimated Duration 0:00	
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Date WO Pulled for Re-Schedule	Interruptible? <input type="checkbox"/>	Crew	Modified
			By DWALTERS
			Date 2004-05-10-11.46.00

LDAR Information

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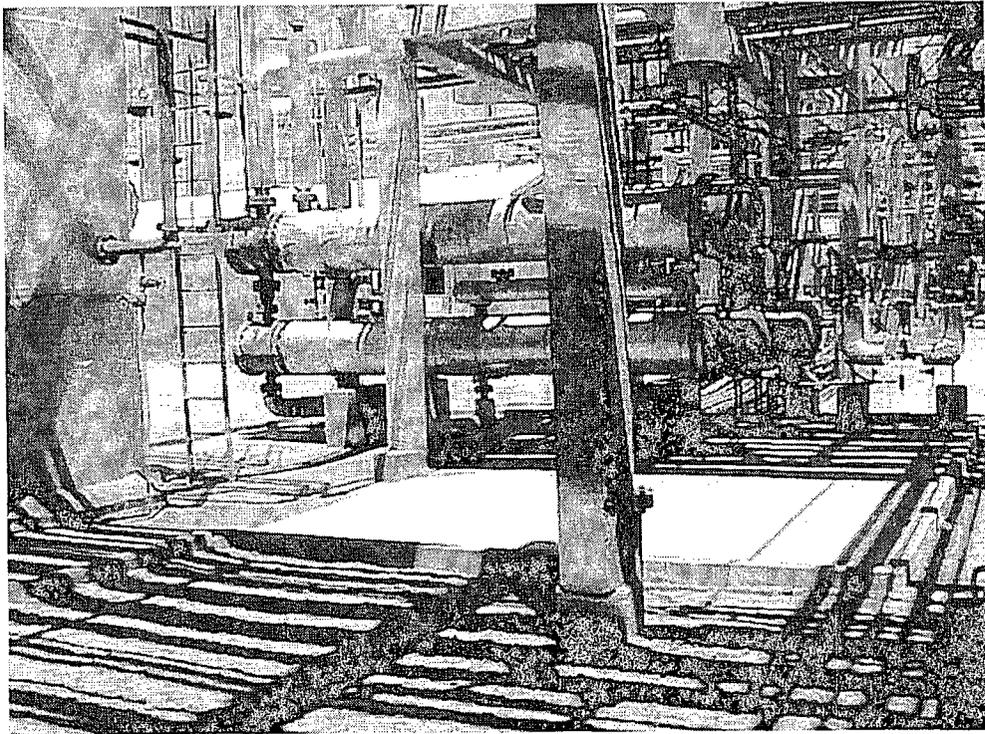
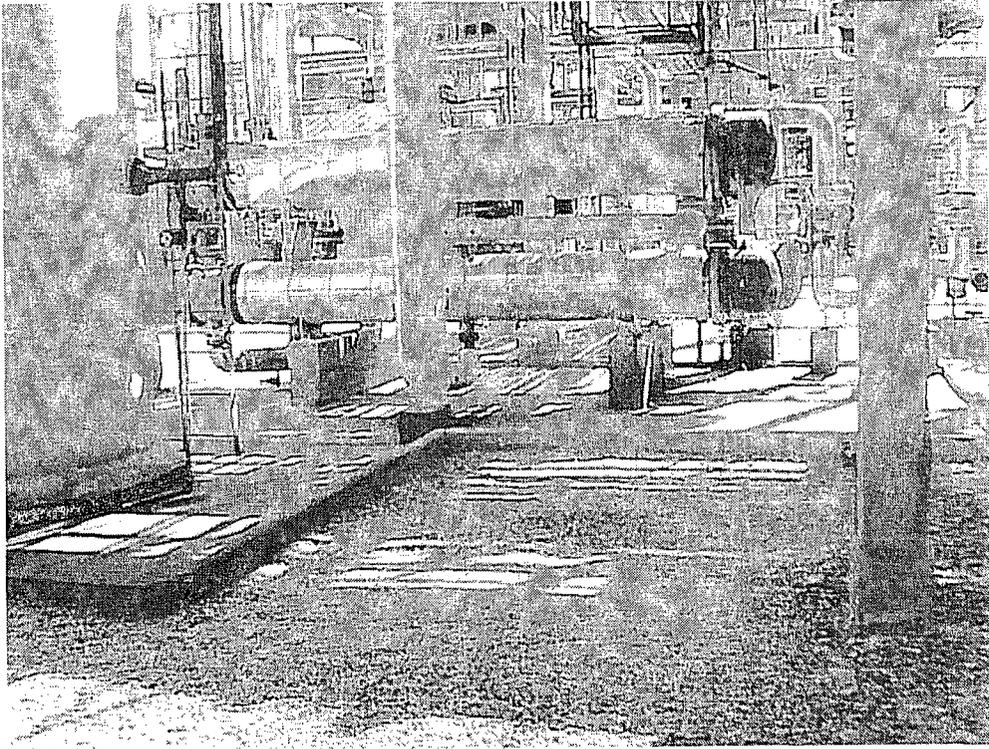
1st Attempt Date 1st Monitor ppm

2nd Attempt Date 2nd Monitor ppm

Comments

ments2

New Chemical Pad South of V-105 & V-106



WO # C1772 Install concrete curb on south side of exchanger cleaning pad.

Location BLMFD Bloomfield Refining Company Loc/Eq Pri WO Pri 0

Equip # Is Equip Up? Scheduled 1st Out

Reported By RSCHMALTZ Reported Date 2003-09-15-13.31.00 Supervisor Appr Ops Appr

Status COMP Status Date 2004-05-10-11.46.00 Charge to Store? N Work Type ENV

Acct # 2164060.??????? RFE? RFE # Warranty Date

Comments

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan	Failure Class	Supervisor BLUCERO	TA Date
Safety Plan	Problem Code	Lead Craft CON	Special Sort
PM	Follow-up Work	Order Plan Materials!	Additional Tracking Info
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Start	Completion	Remaining Duration	Modified
Target 2004-05-05-0.00.00			By DWALTERS
Scheduled		Estimated Duration 0:00	Date 2004-05-10-11.46.00
Actual 2004-05-04-10.28.00	2004-05-10-11.46.00		
Date WO Pulled for Re-Schedule	Interruptible? <input type="checkbox"/>	Crew	

LDAR Information

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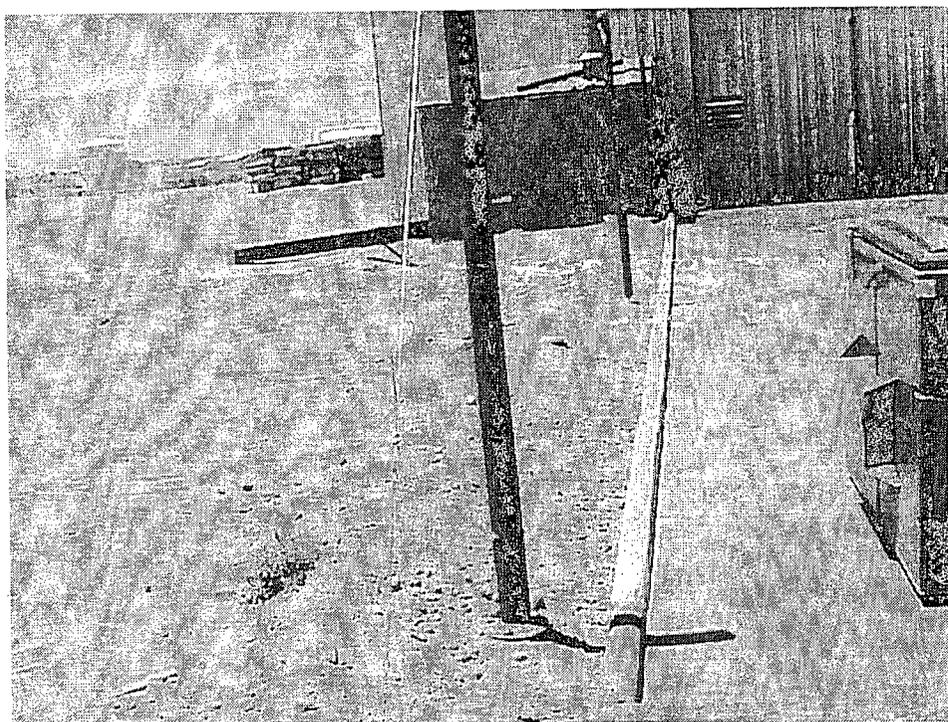
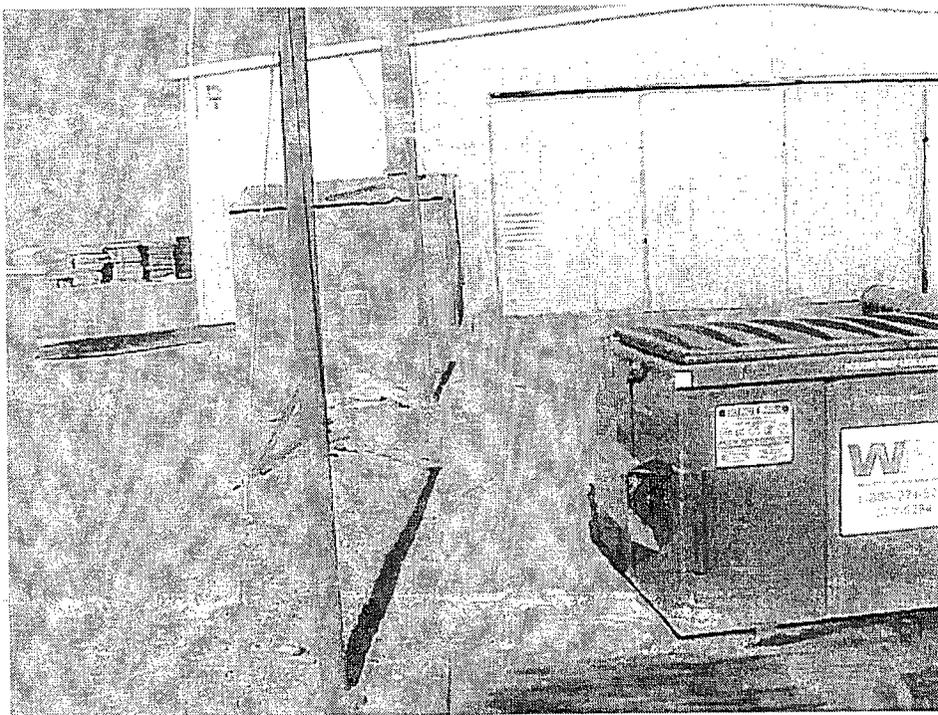
1st Attempt Date 1st Monitor ppm

2nd Attempt Date 2nd Monitor ppm

Comments

Comments2

New Curb on Hydroblast Pad



WO # 56607 Construct wall north of B22, B23 to route spilled/released LPG from flowing under the north bank of tanks

Location BULLETT-44 Pressurized Storage Tanks Loc/Eq Pri WO Pri 0

Equip # Is Equip Up? Scheduled 1st Out

Reported By JUSTIFFLER Reported Date 2002-08-28-15.12.00 Supervisor Appr Ops Appr

Status COMP Status Date 2004-05-10-11.46.00 Charge to Store? N Work Type

Acct # 2164070.??????? RFE? RFE # Warranty Date

Comments

Job Details	Problem	Responsibility	Misc. TA Data
Job Plan	Failure Class	Supervisor BLUCERO	TA Date
Safety Plan	Problem Code	Lead Craft CON	Special Sort T
PM	Follow-up Work	Order Plan Materials!	Additional Tracking Info
Service Con	Originating WO	Eng Assigned	Drwg Req'd <input type="checkbox"/> Drwg Comp <input type="checkbox"/>
	Has Follow-up Work? N		Welder Req'd <input type="checkbox"/> Fab Comp <input type="checkbox"/>

Scheduling Information			Additional Tracking Info	
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Scheduled		Estimated Duration 0:00	Mats Ordered <input type="checkbox"/>	Matt's Rec'd <input type="checkbox"/>
Actual 2004-05-04-10.28.00	2004-05-10-11.46.00		MOC Written <input type="checkbox"/>	MOC <input type="checkbox"/>
Date WO Pulled for Re-Schedule	Interruptible? <input type="checkbox"/>	Crew	Modified	
			By DWALTERS	
			Date 2004-05-10-11.46.00	

LDAR Information

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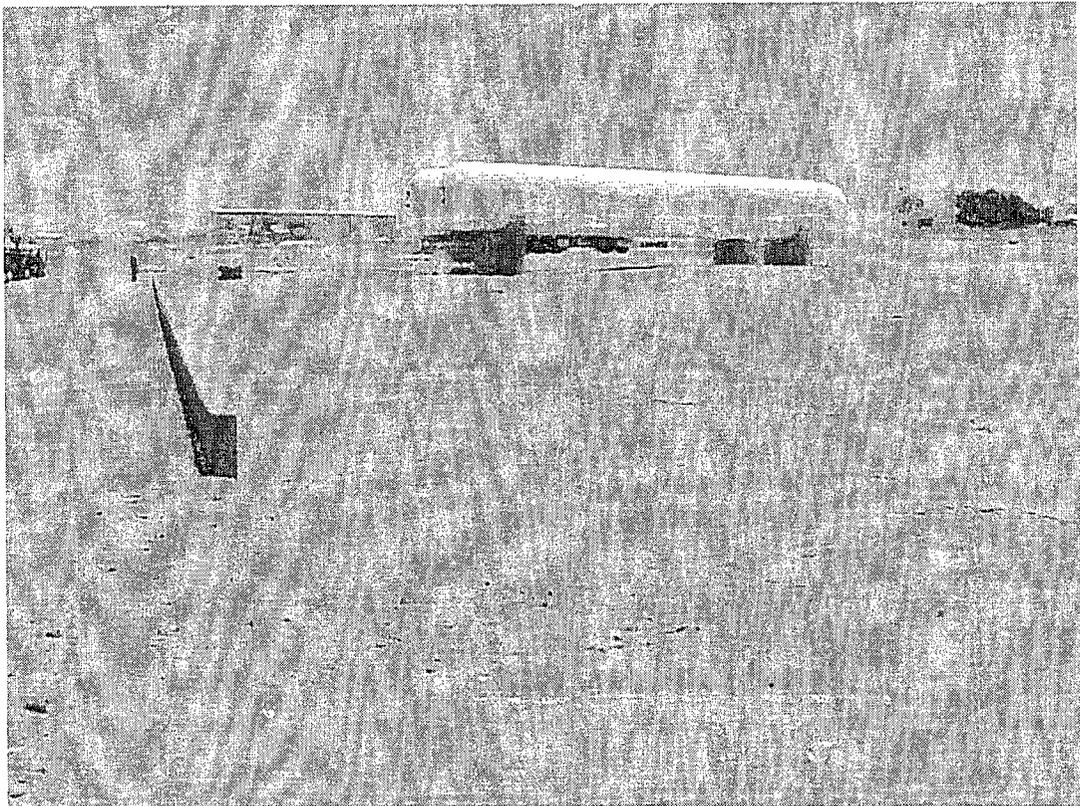
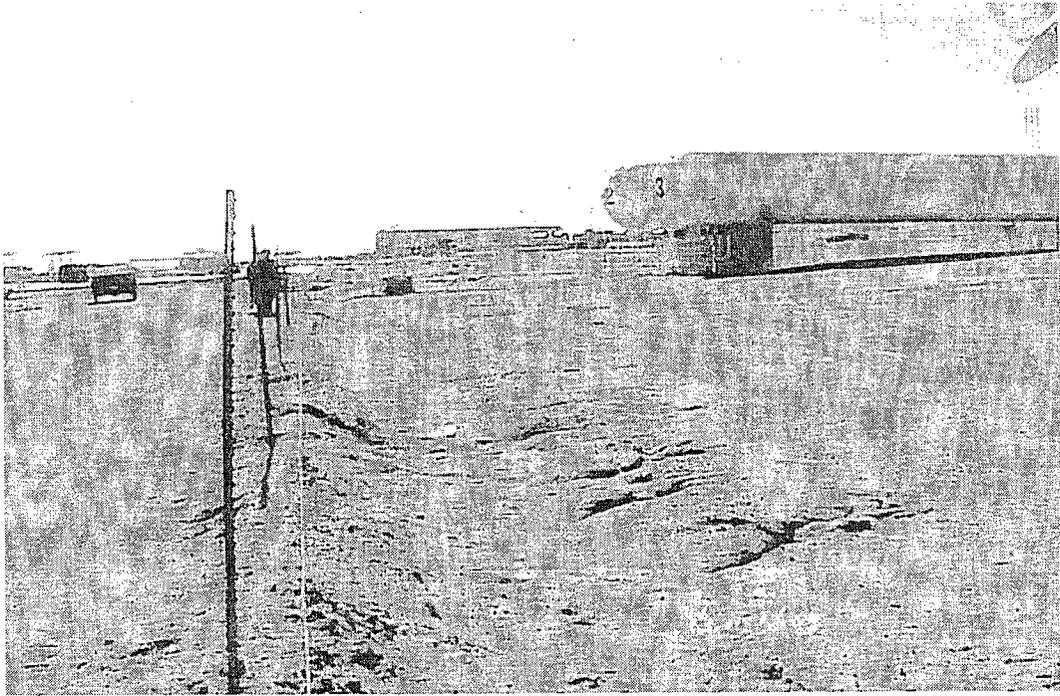
1st Attempt Date 1st Monitor ppm

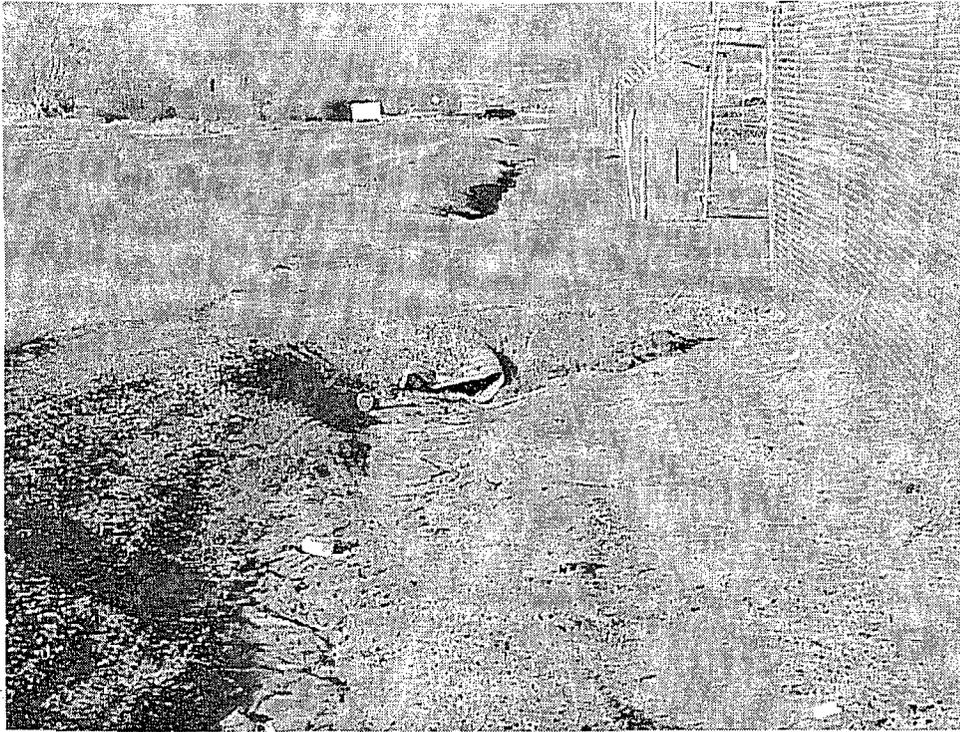
2nd Attempt Date 2nd Monitor ppm

Comments

Comments2

Spill Containment for B-22 and B-23





WO # 57873 Please repair the culvert located @ southeast entrance from Sullivan Rd. to burner rack. It has been run over
 Location GENERAL-75 MAINTENANCE GENERAL Loc/Eq Pri WO Pri 0
 Equip # Is Equip Up? Scheduled 1st Out
 Reported By CHURTADO Reported Date 2002-11-25-14.07.00 Supervisor Appr RSchmitz Ops Appr
 Status COMP Status Date 2003-01-28-14.35.00 Charge to Store? N Work Type RO
 GL Acct # 16-060-???????? RFE? RFE # Warranty Date
 ents

Job Details		Problem		Responsibility		Misc. TA Data	
Job Plan		Failure Class		Supervisor	MRUTTER	TA Date	
Safety Plan		Problem Code		Lead Craft	GM	Special Sort	
PM		Follow-up Work		Eng Assigned		Additional Tracking Info	
Service Con		Originating WO				Drwg Req'd	<input type="checkbox"/>
		Has Follow-up Work?	N			Drwg Comp	<input type="checkbox"/>
Start Scheduling Information				Completion			
Target	2003-01-21-0.00.00			Remaining Duration		Welder Req'd	<input type="checkbox"/>
Scheduled				Estimated Duration	0:00	Fab Comp	<input type="checkbox"/>
Actual	2003-01-21-7.35.00		2003-01-28-14.35.00			Mats	<input type="checkbox"/>
						Mats Rec'd	<input type="checkbox"/>
Date WO Pulled for Re-Schedule				Interruptible?	<input type="checkbox"/>	Crew	
						Modified	
						By	DWALTERS
						Date	2003-01-28-14.35.00

LDAR Information

LDAR Tag # Leak Source

1st Attempt Date 1st Monitor ppm

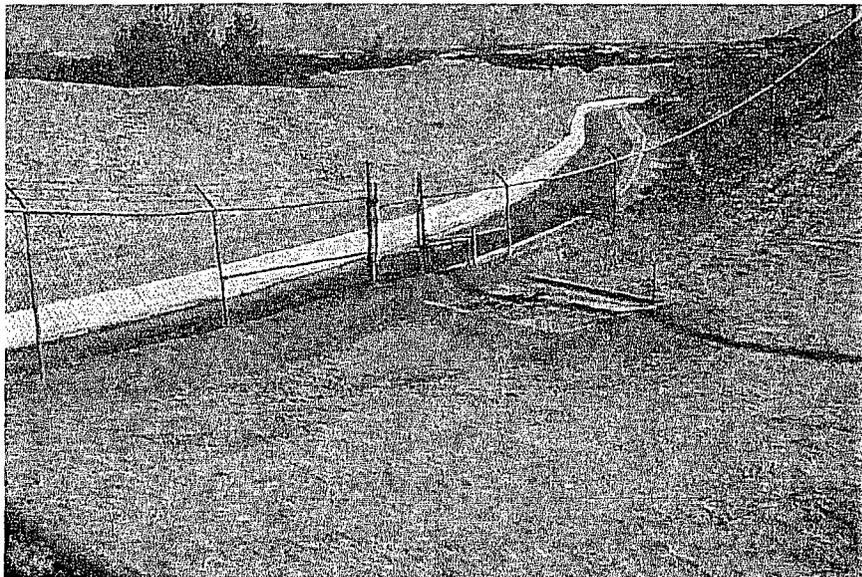
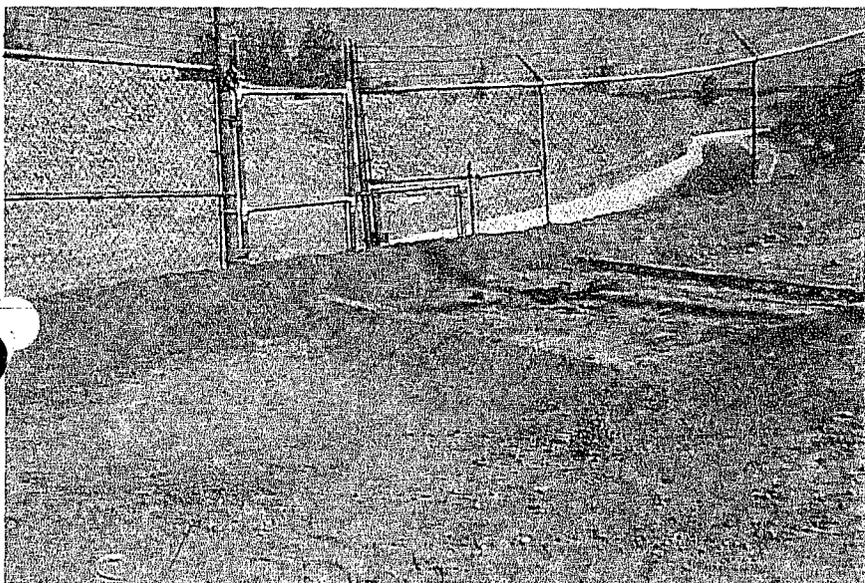
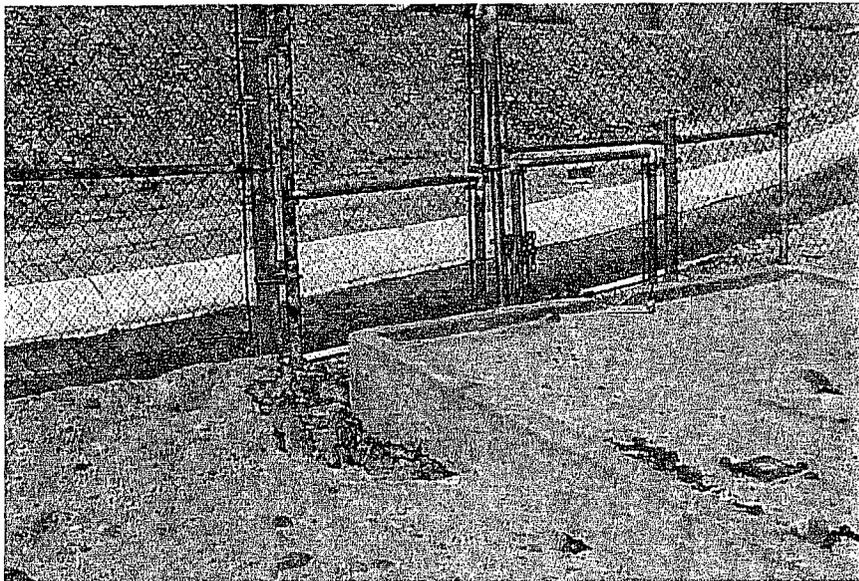
2nd Attempt Date 2nd Monitor ppm

Comments

omments2

W/C berm area @ the old firehouse along fence & gate.
 Loc ENVIRON Environmental Loc/Eq Pri WO Pri 0
 Equip # Is Equip Up? Scheduled 1st Out
 Reported By CHURTADO Reported Date 2002-09-19-14.37.00 Supervisor Appr BHolman Ops Appr
 Status COMP Status Date 2002-09-27-8.53.00 Charge to Store? N Work Type RO
 GL Acct # 16-060-???????? RFE? RFE # Warranty Date
 ents

Job Details Job Plan <input type="text"/> Safety Plan <input type="text"/> PM <input type="text"/> Service Con <input type="text"/>		Problem Failure Class <input type="text"/> Problem Code <input type="text"/> Follow-up Work Originating WO <input type="text"/> Has Follow-up Work? <input type="checkbox"/> N		Responsibility Supervisor MRUTTER Lead Craft GM Eng Assigned <input type="text"/>		Misc. TA Data TA Date <input type="text"/> Special Sort <input type="text"/> Additional Tracking Info Drwg Req'd <input type="checkbox"/> Drwg Comp <input type="checkbox"/> Welder Req'd <input type="checkbox"/> Fab Comp <input type="checkbox"/> Matts <input type="checkbox"/> Mat's Rec'd <input type="checkbox"/> MOC Written <input type="checkbox"/> MOC <input type="checkbox"/>																			
Scheduling Information <table border="1"> <tr> <td>Target</td> <td>2002-09-24-0.00.00</td> <td>Completion</td> <td><input type="text"/></td> <td>Remaining Duration</td> <td><input type="text"/></td> </tr> <tr> <td>Scheduled</td> <td><input type="text"/></td> <td></td> <td></td> <td>Estimated Duration</td> <td>0:00</td> </tr> <tr> <td>Actual</td> <td>2002-09-23-10.07.00</td> <td>2002-09-27-8.53.00</td> <td></td> <td></td> <td></td> </tr> </table>				Target	2002-09-24-0.00.00	Completion	<input type="text"/>	Remaining Duration	<input type="text"/>	Scheduled	<input type="text"/>			Estimated Duration	0:00	Actual	2002-09-23-10.07.00	2002-09-27-8.53.00				Date WO Pulled for Re-Schedule <input type="text"/> Interruptible? <input type="checkbox"/> Crew <input type="text"/>		Modified By DWALTERS Date 2002-09-27-8.53.00	
Target	2002-09-24-0.00.00	Completion	<input type="text"/>	Remaining Duration	<input type="text"/>																				
Scheduled	<input type="text"/>			Estimated Duration	0:00																				
Actual	2002-09-23-10.07.00	2002-09-27-8.53.00																							



Attachment 8

Location Map

Figure 1 - Stormwater Map

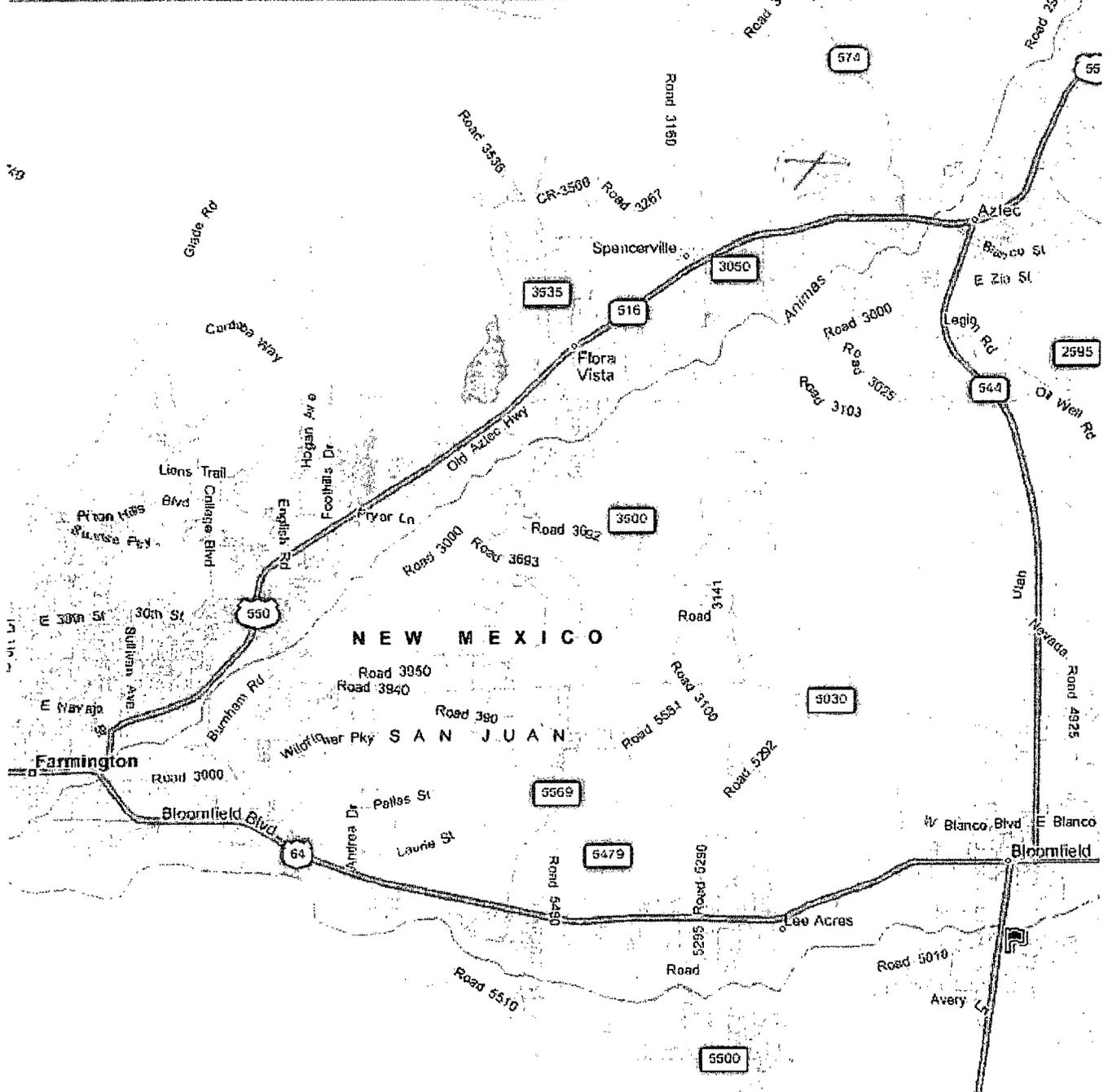
Figure 2 - Outfall #1

Figure 3 - Outfall #2

Figure 4 - Natural Retention Area



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Explanation of Maps for Drainage Basins

1. Specific BMP maps contain information regarding significant materials or activities included in their basins.
2. No significant spills have taken place in the past 3 years therefore you will find none marked.
3. Maps are marked with "Outfall 1" or "Outfall 2" which signifies a stormwater discharge as covered under this program.
4. On each map the BMPs are marked and identified.
5. All non-discharging basins are marked with hash marks on maps.
6. Because our facilities map contains topography, all facilities, various lines denoting basins, stormwater detention pond, and other information Bloomfield is relying on the plan to contain the bulk of the explanation of BMPs and significant materials.