GW - 344

PERMITS, RENEWALS, & MODS Application

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

AUGUST 22, 2011

Mr. Cal Wrangham
Targa Midstream Services, L.P.
6 Desta Drive
Midland, Texas 79705

Mr. Wrangham:

In its August 16, 2011 letter, the Oil Conservation Division (OCD) mistakenly referred to several facilities that Targa does not operate. We apologize for the confusion.

Based on your responses given in the "Oil & Gas Facilities Questionnaire for Determination of a WQCC Discharge Permit," the Oil Conservation Division (OCD) has determined that several of your facilities with an expired permit do not require a Water Quality Control Commission (WQCC) Discharge Permit. This means that the WQCC Discharge Permits for GW-005 (Eunice GP), GW-025 (Monument GP), GW-026 (Saunders GP), GW-27 (Vada CS, GW-29 (Buckeye CS), GW-344 (South Eunice CS), and GW-345 (North Eunice CS) are hereby rescinded and you are not required to proceed with the renewal of these expired WQCC Discharge Permits. OCD will close these permits in its database.

Because your WQCC Discharge Permits are no longer valid, you may be required to obtain a separate permit(s) for other processes at your facility, such as: pits, ponds, impoundments, below-grade tanks; waste treatment, storage, and disposal operations; and landfarms and landfills. OCD will make an inspection of your facility to determine if any of these existing processes may require a separate permit under OCD's Oil, Gas, and Geothermal regulations If OCD determines that a separate permit(s) is required, then a letter will be sent to you indicating what type of permit is required.

Please keep in mind, if your facility has any discharges that would require a WQCC Discharge Permit now or in the future, then you will be required to renew or obtain a WQCC Discharge Permit.

If you have any questions regarding this matter, please contact Glenn von Gonten at 505-476-3488. Thank you for your cooperation.

Jami Bailey
Director

@ 12.20.10 4 → PDF (C: DRIVE) ONLY

ADDENDUM TO GROUNDWATER DISCHARGE PLAN GW-344

South Eunice Compressor Station
Lea County, New Mexico

LAI Project No. 10-0124-01

November 30, 2010

Prepared for:
Targa Midstream Services, LP
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1.0 Introduction

This addendum to the groundwater discharge plan, GW-344, is submitted to the State of New Mexico Oil Conservation Division (OCD) for the South Eunice Compressor Station (Facility) owned by Versado Gas Processors, LLC (Versado) and operated by Targa Midstream Services, LP (Targa). The Facility is located approximately 5 miles south of Eunice, in Lea County, New Mexico.

This addendum is for the conversion of a Salt Water Disposal (SWD) well, South Eunice Compressor Station SWD Well No. 1 (Versado AGI Well No. 1), API 30-025-21497, to an acid gas injection well (AGIW) and associated pipeline for the injection of acid gas into the AGIW, permit granted under Division Order No. R-12809 and Administrative Order SWD-1611. The South Eunice Compressor Station SWD Well No. 1 (Versado AGI Well No.1) is located 2,580 feet from the south line and 1,200 feet from the west line of said Section 27.

The Skelley Gasoline Plant Well No. 4 (API No. 30-025-23853), cavern storage well has been plugged according to OCD rules. The Skelley well is located 2,471 feet from the south line and 1,658 feet from the west line of Section 27 from the proposed AGIW.

2.0 Operator

Targa will operate the AGIW and pipeline, whose address is as follows:

Operator:	Targa Midstream Services, LP
Facility Name:	South Eunice Compressor Station
Address:	5 miles South on Highway 207 from the intersection of Main Street and Texas Avenue Eunice, New Mexico Gary Maricle, Area Manager
Telephone:	(575) 394-2534
Email:	GMaricle@targaresources.com

3.0 Location

The Facility is located approximately 5 miles south of Eunice, New Mexico in Unit Letter L, Section 27, Township 22 South, Range 37 East, Lea County, New Mexico. The AGIW will be located 2,580 feet from the south line and 1,200 feet from the west line, Unit L of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico. A topographic map is presented in Figure 1.

Driving directions to the Facility from Eunice, New Mexico are as follows:

- Beginning at the intersection of Main Street (New Mexico State Highway 207) and Texas Avenue (New Mexico State Highway 176), proceed South on Main Street for approximately 5-miles to the Facility.

4.0 Expansion Request

This addendum is not an expansion request. The South Eunice Compressor Station SWD Well No.1 (Versado AGI Well No. 1) will be converted to an AGIW. The existing SWD well will be under reamed to extend the open borehole to the full depth of the San Andres formation (4,450 to 5,000 feet below surface). The Skelley Gasoline Plant Well No. 4 (API No. 30-025-23853) was plugged according to OCD rules.

5.0 Ownership

Versado owns the AGIW located in Section 27, Township 22 South, Range 37 East, Lea County, New Mexico. The acid gas pipeline with 100 foot easement will be installed in Sections 3, 10, 15, 22, and 27, Township 22 South, Range 37 East, Lea County, New Mexico.

An acid gas pipeline and AGIW map is presented in Appendix A.

6.0 Description

The AGIW will be located at 2,580 feet from the south line and 1,200 feet from the west line (Unit L) of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico. The AGIW will accept natural gas processing wastes (waste water and acid gas) from the Versado's South Eunice Compressor Station and Eunice Middle Gas Plant located approximately 1-mile southeast of Eunice, New Mexico.

The gas processing waste will be delivered to the facility in a 16-inch polyethylene pipeline cased inside a 20-inch polyethylene pipeline. A smaller polyethylene pipeline will be buried in the same right-of-way over the 20-inch pipeline. The smaller polyethylene will convey cooling tower blow-down water which will be comingled with the acid gas at the stainless steel compressor located at the facility.

The processing wastes will be injected into the San Andres formation, at a depth interval approximately 4,450 to 5,000 feet below surface. The average injection pressure is estimated to be 1,200 psi and the maximum 2,000 psi. The average daily injection rate will be 2,200 barrels per day with the maximum injection of 2,500 barrels of acid gas per day.

The acid gas is comprised of approximately 85% Carbon dioxide, 15% Hydrogen sulfide and traces of Methane, Nitrogen and hydrocarbons. The waste water and acid gas will be continuously mixed and kept under pressure to maintain a 'liquid phase' for injection.

7.0 Construction

The injection well will be cased and cemented in accordance with the requirements of the OCD as to protect the Penrose sands, Salado salt interval and all water sands down to the Rustler anhydrite. The proposed well will be equipped with injection tubing coated to prevent corrosion from the waste water and acid gas waste streams. An air blower will move air through the casing–tubing annulus from the acid gas compressor toward the Plant where a fixed H_2S detector is located to detect any leaks from the inner pipe. The well will be equipped with a back pressure choke or valve to maintain pressure on the stream. Gauges will be installed before and after the tubing choke and on the annulus to record pressures.

8.0 Operation

The AGIW will be operated by Targa in a safe and responsible manner as to not adversely impact groundwater, surface water, public health or the environment. Wellhead pressures, injection rates and volumes of all components entering the well will be recorded and maintained by Targa.

9.0 Monitoring

A groundwater sample from a monitor well located at the facility (MW-2) will be collected prior to installing the AGIW and annually, thereafter. The sample will be collected using industry-accepted methods, preserved and submitted under chain of custody control to an environmental laboratory for Total Petroleum Hydrocarbons (TPH), benzene, toluene, ethyl benzene, total xylenes (BTEX), metals (arsenic, barium, cadmium, calcium, chromium, lead, magnesium, mercury, potassium, sodium, selenium and silver), anions (chloride and sulfate), Total Dissolved Solids (TDS), and alkalinity analyses using OCD accepted methods.

The laboratory reports will be included in an annual report, which will be submitted to OCD within 45-days after receipt of the laboratory report.

10.0 Spill Reporting

The AGIW and pipeline will be operated in accordance with spill reporting and response requirements of the ground water discharge plan (GW-344).

11.0 Inspection, Maintenance and Reporting

Targa will submit monthly reports of injection volumes of waste water and acid gas on Form C-115, in accordance with Division Rules 706 and 1115. Targa will notify the District of the time of setting of the tubing and packer and any mechanical integrity test so that such operations can be witnessed and/or inspected.

12.0 Closure Plan

OCD will be notified within one (1) month of cessation of operation of the AGIW, South Eunice Compressor Station SWD Well No. 1 (Versado AGI Well No. 1), API No. 30-025-21497. No new waste material will be introduced into the AGIW following notification.

Targa will complete cleanup and restoration within six (6) months following cessation of disposal operations, unless an extension is granted by the OCD.

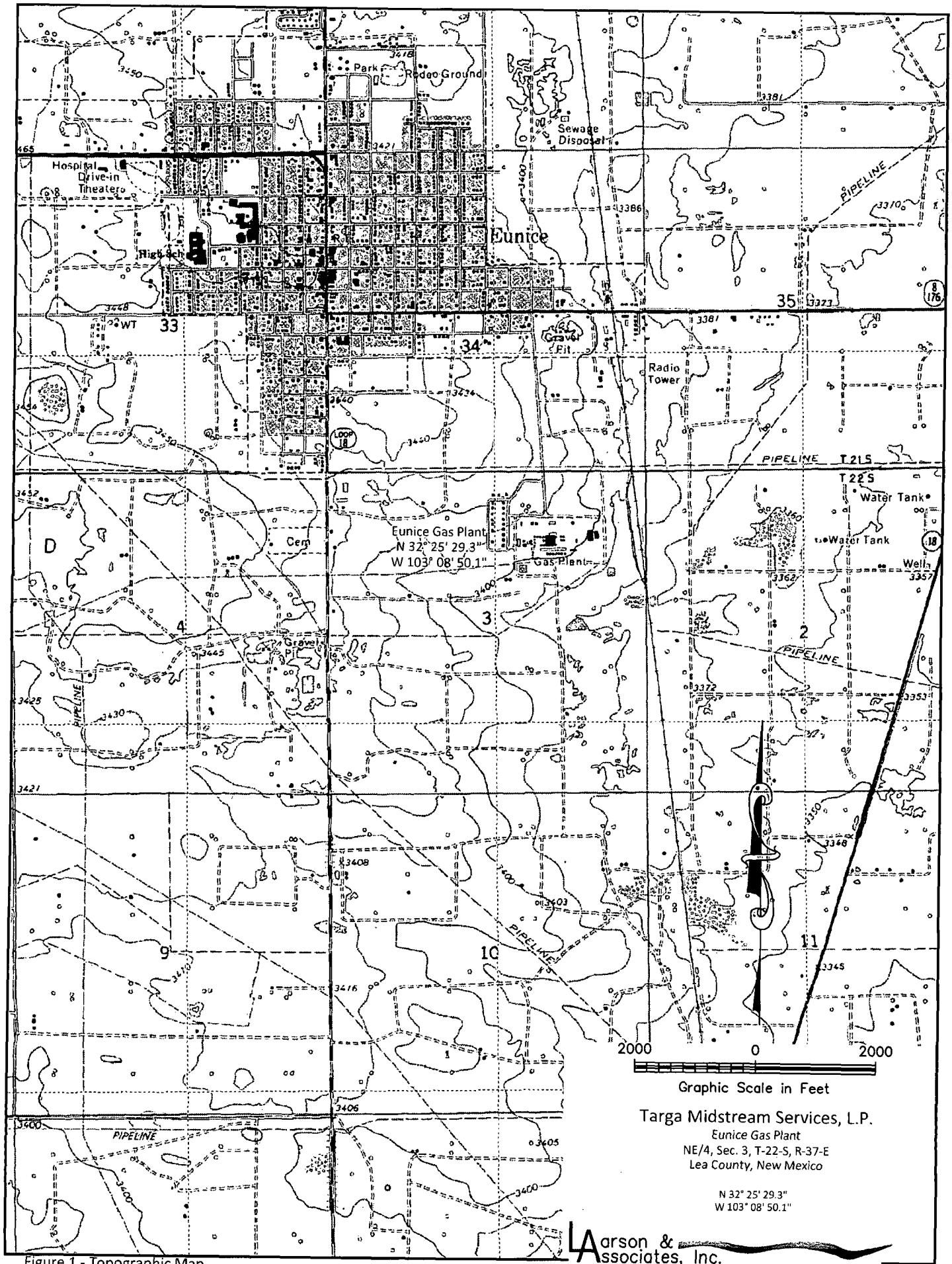
13.0 Hydrogen Sulfide

An H_2S contingency plan that complies with Division Rule Title 19, Chapter 15, Part II has been submitted for review and approval by the Division's Environmental Bureau. The plan will be available for review at the Targa South Eunice Compressor Station, Eunice, Lea County, New Mexico. Appendix B presents Targa's H_2S Contingency Plan.

FIGURES

Y:\PROJECTS\TARGA\8-0172 Eunice Middle Plant\Eunice Gas Plant.dwg, 6/7/2010 2:21:25 PM

JWW



Targa Midstream Services, L.P.

Eunice Gas Plant

NE/4, Sec. 3, T-22-S, R-37-E

Lea County, New Mexico

N 32° 25' 29.3"

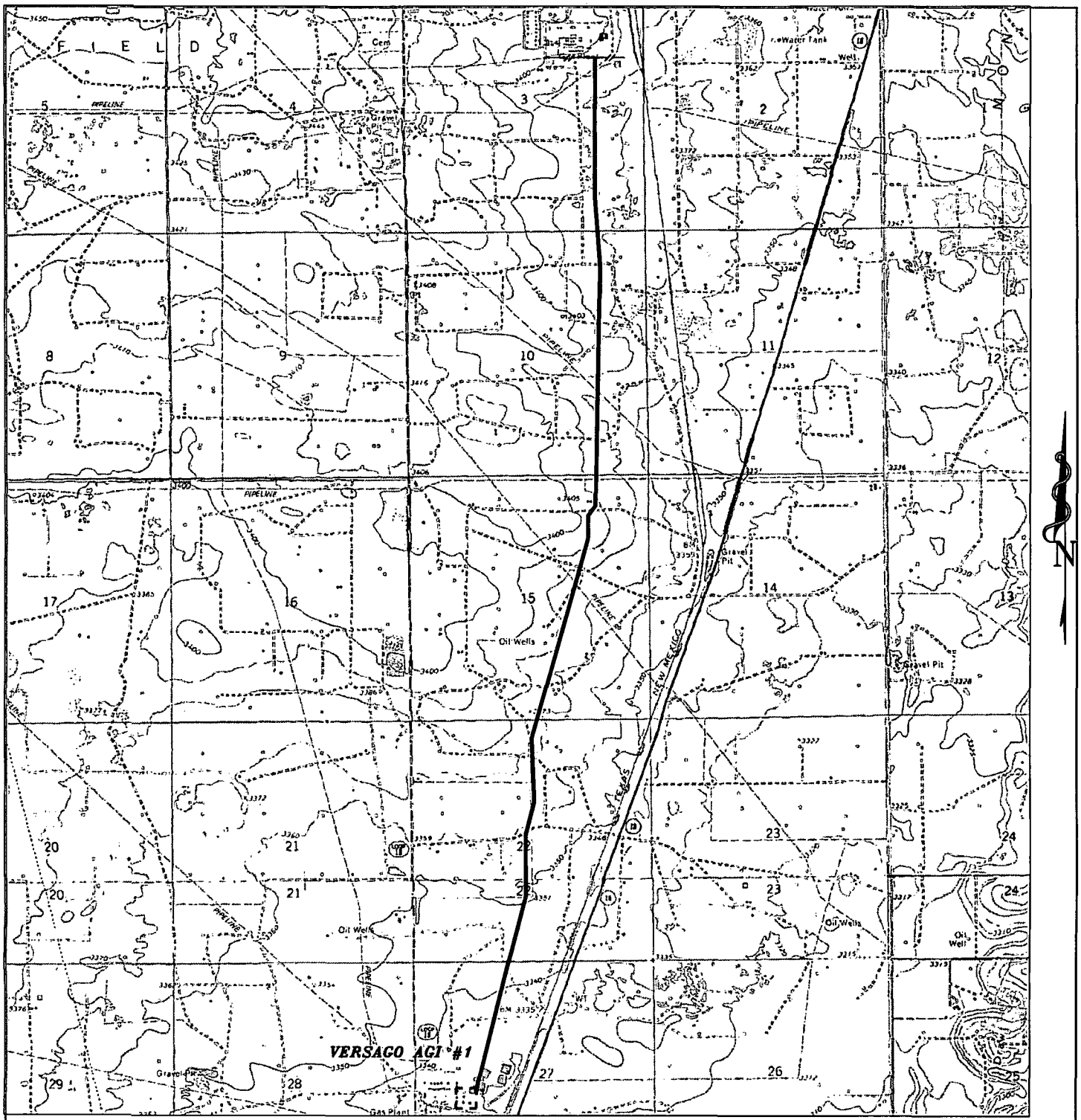
W 103° 08' 50.1"

Larson & Associates, Inc.

Environmental Consultants

Figure 1 - Topographic Map

APPENDIX A



EUNICE ACID GAS LINE
Sections 3,10,15,22&27, Township 22 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	JMS 19950
Survey Date:	VARIES
Scale:	1" = 3000'
Date:	07-11-2008

TARGA RESOURCES

APPENDIX B

TARGA

HYDROGEN SULFIDE CONTINGENCY PLAN

for

EUNICE PLANT, GATHERING SYSTEM

and

EUNICE AREA ACID GAS PIPELINE

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 11 HYDROGEN SULFIDE GAS

VERSADO GAS PROCESSORS, L. L. C.
operated by
TARGA MIDSTREAM SERVICES,
LIMITED PARTNERSHIP

October 6, 2010

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APPENDIX

1. INTRODUCTION

The Eunice Gas Plant (hereinafter the 'Plant') is a natural gas processing plant which handles and/or generates hydrogen sulfide and/or sulfur dioxide; therefore this Hydrogen Sulfide Contingency Plan (H_2S Plan or Plan) has been developed:

1. to satisfy the New Mexico Oil Conservation Division Rule 11;

2. to conform with API "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP 55; and

3. to create a site-specific hydrogen sulfide contingency plan that outlines the emergency response procedures that will be implemented to ensure a coordinated, efficient and immediate action Plan for alerting and protecting operating personnel and the public as well as to prevent or minimize environmental hazards and damage to property.

The terms used in this Plan are to be used in the same manner as defined in Title 19 Chapter 15 Part II of the New Mexico Administrative code (19.15.11.7- Definitions) unless otherwise defined herein.

1.1 PLANT DESCRIPTION

The Plant is located in Eunice, Lea County, New Mexico and encompasses 20+ acres. It is owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, Limited Partnership.

More specifically, the Plant is located in Section 3, Township 22S, Range 37E in Eunice, Lea County, New Mexico.

1. Plants coordinates are:
   Latitude: 32.425264°N Longitude: -103.147499° W

2. Plants physical address is:
   ¾ miles SE of City
   Eunice, New Mexico 88231

3. Plants mailing address is:
   P. O. Box 1909
   Eunice, New Mexico 88231

4. Driving Directions from Eunice, New Mexico to the Plant:
   From the intersection of Main Street and Texas Avenue (New Mexico Highway 176), travel east on Highway 176 (approximately 0.6 miles) to the intersection of US Hwy 176 and County Road 18 (Middle Plant Lane) in Eunice, New Mexico. Turn right onto

County Road 18 and travel south approximately 0.6 mile to the entrance to the Eunice Gas Plant.

The location of the Plant in relation to the city of Eunice is illustrated herein on Figure 1.

Figure 1
Eunice Gas Plant

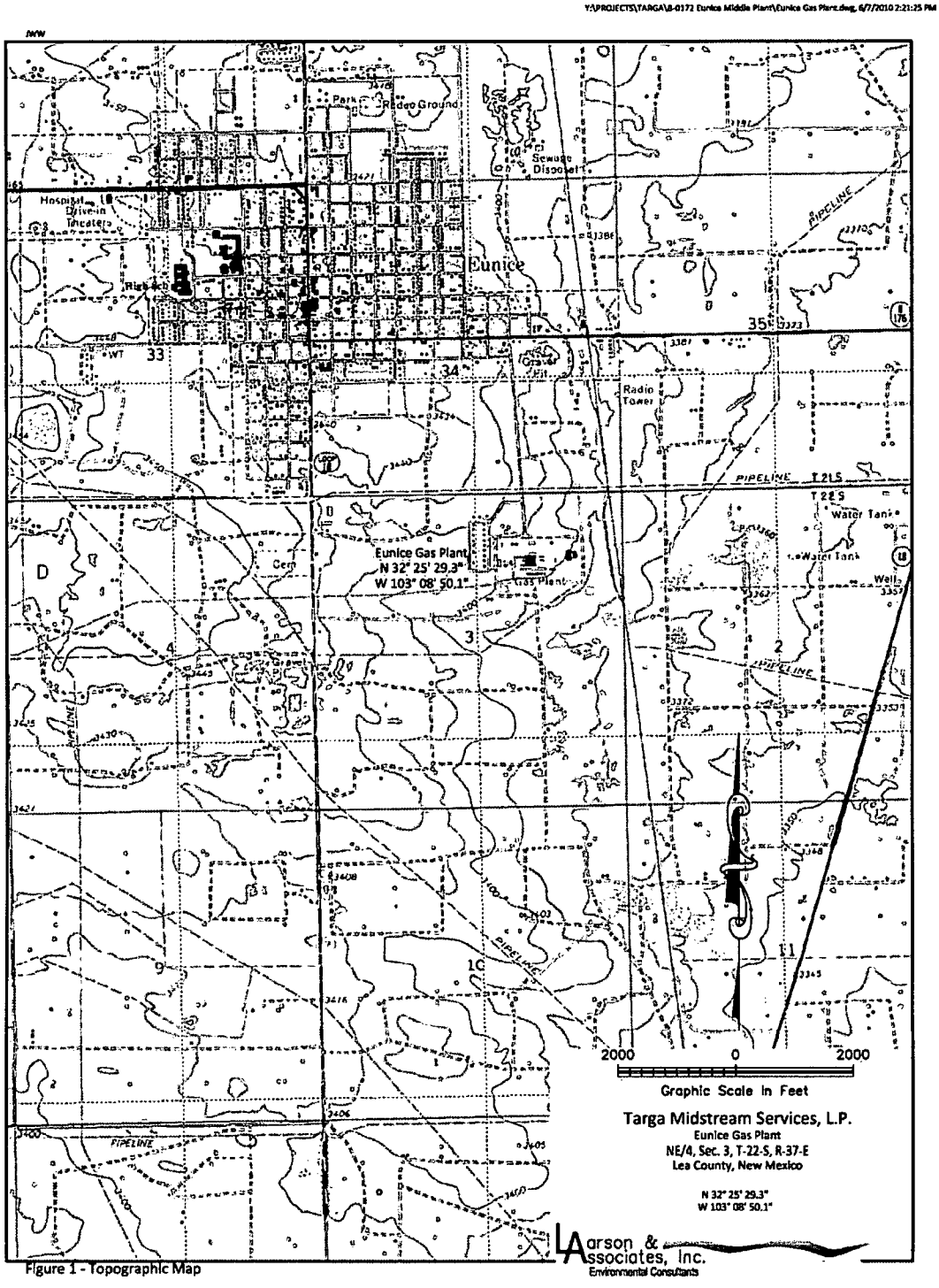


Figure 1 - Topographic Map

1.2 ACID GAS INJECTION & MAP

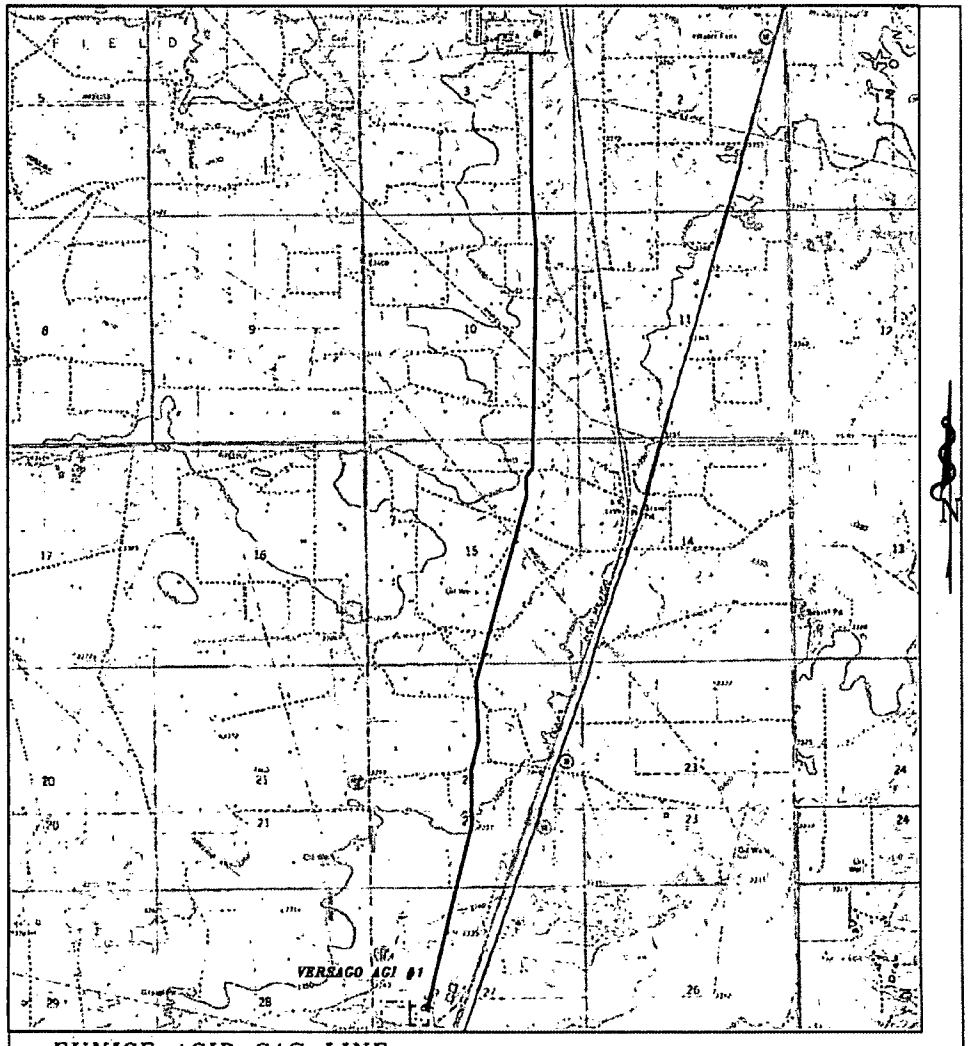
The Eunice Acid Gas Injection line is located in Lea County, New Mexico. The acid gas line encompasses approximately 4.5 mile corridor of privately owned land. A 100 foot wide easement for line installation has been established. The acid gas injection line is owned by Versado Gas Processors, LLC and operated by Targa Midstream Services, LP.

The acid gas pipeline is located in Sections 3, 10, 15, 22 and 27, Township 22 South, Range 37 East, Lea County, New Mexico.

The acid gas injection well is located 1200 feet from the west line and 2580 feet from the south line, Unit L of Section 27, Township 22 south, Range 37 east, NMPM, Lea County, New Mexico.

The location of the Plant and Acid Gas Pipeline is illustrated herein on Figure 2.

Figure 2
Eunice Gas Plant &
Acid Gas Pipeline



1.3 DESCRIPTION OF OPERATIONS

1. The Plant operations include gas processing, conditioning and compression, as well as flow lines and storage tanks. The Plant gathers and processes produced natural gas from Lea and Eddy Counties, New Mexico. Once gathered at the Plant, the produced natural gas is compressed; treated in an amine process for the removal of carbon dioxide and hydrogen sulfide; and dehydrated to remove the water content. The processed natural gas and recovered gas liquids are sold and shipped to various customers.

2. Because the natural gas that is gathered at the Plant contains hydrogen sulfide, it must be treated or processed to remove these and other impurities. The carbon dioxide and hydrogen sulfide (H_2S) stream that is removed from the natural gas in the amine treating process is compressed to approximately 50 psi and is sent via a high density 16" polyethylene which is inserted into a 22" poly line.

3. The Plant is in the process of installing an acid gas injection (AGI) well to accommodate disposal of the acid gas stream generated by existing operations, therefore permanently shutting down the Sulfur Recovery Unit and its permitted air emissions. The operation generates approximately 5 mmcf/d of acid gas for disposal, which consists of approximately 15% H_2S and 85% carbon dioxide.

1.4 DESCRIPTION OF ACID GAS PIPELINE OPERATIONS

1. The acid gas stream is received at the well site (located at the South Eunice Compressor Station about 5 miles south of the Plant) where it mixed with water and is further compressed to 1200 psi for injection. This is accomplished by using an electric driven, reciprocating compressor.

2. The acid gas is injected into the San Andres Formation at a depth of 4450 feet to 5000 feet below the surface. The wellbore is constructed with 3 casing strings, all with cement circulated to the surface. The acid gas well is permitted under Division Order No. R-12809 and Administrative Order SWD-1611.

3. An air blower will move air through the pipeline annulus (which is the between the outside of the 16" and inside of the 22" poly lines) from the acid gas compressor toward the Plant where a fixed H_2S detector is located to detect any leaks from the inner pipe. This detector system alarms in the Eunice Plant Control Room which is manned 24 hours a day.

4. An ESD Valve located at the inlet of the Pipeline and another one at the compressor and injection well end which can be remotely operated from the Eunice Plant Control Room in case of emergency. There are also remotely activated valves at the Compressor/Injection Site to move any gas from the pipeline to a Flare for safe removal in an emergency.

5. There is a subsurface safety valve (SSSV) on the injection well located below ground to isolate the down hole well contents in case of an emergency.

6. The acid gas compressor area is equipped with a fixed H_2S detector system which alarms in the Eunice Plant Control Room which is occupied 24 hours a day.

7. The pipeline ROW has warning signs containing the words "poison gas" to warn the public that a potential danger exists.

8. The compressor/injection area is protected from public access with chain link fencing.

9. Wind direction indicators known as wind socks are located at the compressor/injection site so that it is visible from all principal working areas at all times.

2. THE PLAN

2.1 RESPONSIBILITY FOR CONFORMANCE WITH THE H_2S PLAN

It is the responsibility of all personnel on-site to follow the safety and emergency procedures outlined in the Hydrogen Sulfide Contingency Plan (the H_2S Plan) as well as the following documents:

- Targa Midstream Safety & Health Manual;
- Targa Midstream Eunice Plant Emergency Response, Groundwater Discharge Plan and Oil Spill Contingency Plan; and
- Targa Midstream Environmental Policies and Programs.

2.2 REVISIONS TO THE PLAN

The H_2S Plan will be reviewed annually and revised as necessary to address changes to the Plant facilities, operations, or training requirements, contact information and the public areas including roads, businesses, or residents potentially affected by the operations of the Plant, specifically those areas within the radii-of-exposure.

2.3 AVALABILITY OF THE H_2S PLAN

The H_2S Plan shall be available to all personnel responsible for implementation, regardless of their normal location assignment. A copy of the Plan will be maintained at the Plant in the Area Manager's office, control room and all Plant Supervisors. See Appendix A for the H_2S Distribution List, which lists all the additional entities that have been provided a copy of the H_2S Plan.

2.4 CONTENT OF THE PLAN

At a minimum, the H_2S Plan will contain information regarding:

1. The emergency procedures to be followed in the event of an H_2S or SO_2 release that may pose a threat to the Plant, public or public areas;

2. The characteristics of H_2S and SO_2;

3. A facility description, map and/or drawings; and

4. Information regarding training and drills to be conducted related to this Plan.

3. PLAN DESIGN CONSIDERATIONS

3.1 CHARACTERISTICS OF H_2S, SO_2 AND CARBON DIOXIDE

3.1.1 Hydrogen Sulfide (H_2S)

The proposed inlet gas streams into the Plant will contain approximately 6,000 ppm (or 0.60 mole percent) of hydrogen sulfide based on data generated from the sampling of the inlet gas on September 28, 2010.

Hydrogen sulfide is a colorless, toxic and flammable gas, and has the odor of rotten eggs. Hydrogen sulfide gas is heavier than air.

Hydrogen sulfide presents a significant health hazard by paralyzing the respiratory system resulting in serious injury or death.

Hydrogen Sulfide Properties & Characteristics	
CAS No.	7783-06-4
Molecular Formula	H_2S
Molecular Weight	34.082
TWA	10 ppm
STEL	15 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	1.189
Boiling Point	-76.5°F
Freezing Point	-121.8°F
Vapor Pressure	396 psia
Auto Ignition Temperature	518°F
Lower Flammability Limit	4.3%
Upper Flammability Limit	46.0%
Stability	Stable
pH in Water	3
Corrosivity	Reacts with metal, plastics, tissues & nerves

Physical Effects of Hydrogen Sulfide		
Concentration		Physical Effect
ppm	%	
1	.00010	Can be smelled (rotten egg odor)
10	0.0010	Obvious & unpleasant odor; Permissible Exposure Limit; Safe for 8-hour exposure
15	0.0015	Short Term Exposure Limit (STEL); Safe for 15 minutes of exposure without respirator
50	0.0050	Loss of sense of smell in 15 minutes
100	0.0100	Immediately Dangerous to Life & Health (IDLH); Loss of sense of smell in 3-15 minutes; Stinging in eyes & throat; Altered breathing
200	0.0200	Kills smell rapidly; Stinging in eyes & throat
500	0.0500	Dizziness; Unconscious after short exposure; Need artificial respiration
700	0.0700	Unconscious quickly; death will result if not rescued promptly
1,000	0.1000	Instant unconsciousness; followed by death within minutes

3.1.2 Sulfur Dioxide (SO_2)

Sulfur dioxide is produced as a by-product of H_2S combustion. The waste gas stream consisting of hydrogen sulfide and carbon dioxide is routed to the plant acid gas flare during abnormal conditions when the acid gas injection equipment is out of service. Waste gas is routed to the acid gas flare during maintenance operations.

It is colorless, transparent, and is non-flammable, with a pungent odor associated with burning sulfur.

Sulfur dioxide is heavier than air, but will be picked up by a breeze and carried downwind at elevated temperatures. Sulfur dioxide can be extremely irritating to the eyes and mucous membranes of the upper respiratory tract.

Sulfur Dioxide Properties & Characteristics	
CAS No.	7446-09-5
Molecular Formula	SO_2
Molecular Weight	64.07
TWA	2 ppm
STEL	5 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	2.26
Boiling Point	14°F
Freezing Point	-103.9°F
Vapor Pressure	49.1 psia
Auto Ignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
Corrosivity	Could form an acid rain in aqueous solutions

Physical Effects of Sulfur Dioxide	
Concentration	**Effect**
1 ppm	Pungent odor, may cause respiratory changes
2 ppm	Permissible exposure limit; Safe for an 8 hour exposure
3-5 ppm	Pungent odor; normally a person can detect sulfur dioxide in this range
5 ppm	Short Term Exposure Limit (STEL); Safe for 15 minutes of exposure
12 ppm	Throat irritation, coughing, chest constriction, eyes tear and burn
100 ppm	Immediately Dangerous To Life & Health (IDLH)
150 ppm	So irritating that it can only be endured for a few minutes
500 ppm	Causes a sense of suffocation, even with first breath
1,000 ppm	Death may result unless rescued promptly.

3.1.3 Carbon Dioxide

The current inlet gas streams to the Plant contain approximately 3.8% carbon dioxide based on an inlet sample collected on September 28, 2010.

Carbon dioxide gas is colorless, odorless, and non-flammable. Carbon dioxide is heavier than air.

Carbon Dioxide Properties & Characteristics	
CAS No.	124-38-9
Molecular Formula	CO_2
Molecular Weight	44.010
TWA	5,000 ppm
STEL	30,000 ppm
IDLH	40,000 ppm
Specific Gravity (air = 1.0)	1.5197
Boiling Point	-109.12°F
Freezing Point	-69.81°F
Vapor Pressure	830 psia
Auto Ignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
pH in saturated solution	3.7
Corrosivity	dry gas is relatively inert & not corrosive; can be corrosive to mild steels in aqueous solutions

Physical Effects of Carbon Dioxide	
Concentration	**Effect**
1.0 %	Breathing rate increases slightly
2.0 %	Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness
3.0 %	Breathing rate increases to twice normal rate and becomes labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate
4 – 5 %	Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt
5 – 10 %	Characteristic sharp odor noticeable. Very labored breathing, headache, visual impairment, and ringing in the ears. Judgment may be impaired, followed within minutes by loss of consciousness
10 – 100 %	Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation

3.2 RADII OF EXPOSURE (ROE)

For the existing operations, the Radius of Exposure for both 500-ppm and 100-ppm of H_2S gas was determined using the The Pasquill-Gifford derived equation, as defined by NMAC, which uses the maximum daily rate of the gaseous mixture that is handled by the Plant.

The rates and other variables used to calculate the ROE is discussed in greater detail in **Appendix B - ROE calculations. Also refer to Appendix C - map showing 500-ppm ROE and the 100-ppm ROE.**

500 ppm ROE – public road	**2,900 feet**
300 ppm ROE	**4,033 feet**
100 ppm ROE – public area	**6,346 feet**

4. EMERGENCY ACTION PROCEDURES

4.1 EMERGENCY RESPONSE ORGANIZATION

The Plant uses the Incident Command System (ICS) for emergency response. The ICS structure used is based on the National Interagency Incident Management System (NIIMS), and is consistent with the National Contingency Plan (NCP).

In the event of an accidental release that results in the activation of the H_2S Plan and all personnel have been evacuated out of the affected area, the Area Manager, or his designee, will be the On-Scene Incident Commander (IC in this Plan). Upon notification of an emergency the Area Manager or his relief will serve as the Field Incident Commander (FIC). Under certain conditions, the New Mexico State Police responding to the emergency may elect to assume the position of FIC or they may establish a Unified Command of which the Targa Area Manager may be a key member. The responsibility of the FIC is to ensure control of the emergency incident. The IC will contact and coordinate with Targa's management in corporate office.

The Area Manager or his designee shall determine:

1. Plant Shutdowns;
2. Isolation of pipeline segments; and
3. Repairs, tests or restarts as required.

If an emergency occurs, the Area Manager, or his designee, shall be notified first. The Area Manager, or his designee, shall notify Targa's Office in Midland, Texas. If any person in this chain of command is unavailable, the Targa employee shall elevate the communication to the next level.

4.2 EMERGENCY RESPONSE

This section explains the procedures and decision to be used in the event of an H_2S release; much of which has been pre-determined to ensure a coordinated, efficient and immediate action Plan for alerting and protecting operating personnel and the public as well as to prevent or minimize environmental hazards and damage to property.

4.2.1 Objective

All Area employees shall be prepared to respond to an H_2S or SO_2 emergency at the Plant and Pipelines. Emergency response actions may be taken for a variety of situations that may occur in the Plant. The Plan is activated in based on the concentration of H_2S that has been released.

- Plant - Emergency alarm sounded and/or flashing red beacons activated for H_2S greater than 10 ppm,

- 100 ppm in any public area, or
- 500 ppm at any public road, or
- When a 100 ppm ROE is greater than 3,000 feet from the site of the release.

As soon as the Plan has been activated based on the criteria above, the Area Manager, or his designee, shall be notified. In the absence of the Area Manager or his relief the Targa employee (first responder) at the site shall assume the role of FIC and determine whether or not to activate the Contingency Plan. It is the responsibility of the FIC to ensure control of the emergency response management system and if necessary to coordinate these efforts with any state or local emergency plans.

4.2.2 Evacuation and Emergency Assembly Areas

Evacuation to the assembly point for all visitors and Plant personnel begins when the emergency alarm is activated. After assembly, if necessary the Plant operators are to put on the 30-min SCBA to rescue any personnel that are in distress and assist any distressed personnel in evacuating to Emergency Assembly Area 1.

Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The operators will then, wearing the SCBA, investigate the cause of the release. At the sound of the alarm and/or flashing red beacons, all other personnel in the Plant are to stop work, check the prevailing wind direction and immediately proceed along designated evacuation routes and/or upwind to the pre-designated Emergency Assembly Area (Main Office Building) as shown in Appendix D.

Prevailing winds for the area are from the south. Personnel should evacuate along the designated route unless the designated evacuation route is downwind of the release (based on the windsock), then all evacuees should proceed upwind to the Emergency Assembly Areas.

The Plant and acid gas pipeline show evacuation routes to be determined on wind direction and windsocks.

Emergency Assembly Area **Main Office Building of the Plant** **See Appendix D**

Roll call shall be conducted at the Emergency Assembly Area to assure all personnel have evacuated safely. This facility requires all visitors check in before entering the Plant, thus the check-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and visitors.

4.2.3 Immediate Action Plans/Initial Responses

Targa Plant Operators are authorized to elevate the level of response based on observed conditions if a lower level response may not be effective in protecting personnel, the public or the environment.

The following outlines the immediate action Plan. This is to be used when responding to an H_2S release occurring at the Plant, acid gas pipeline or the acid gas well. Additional or long term response actions will be determined on a case-by-case basis, if needed, once the Incident Command Center and System is established following the immediate response.

Some steps may be taken simultaneously.

A. Request assistance, if needed.
    1. Alert and account for facility personnel
    2. Move away from the source and get away from the affected area
    3. Don personal protective breathing equipment
    4. Alert other affected personnel
    5. Assist personnel in distress
    6. Proceed to the designated emergency assembly area
    7. Account for on-site personnel

B. Take immediate measures to control the presence of or potential H_2S discharge and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as deemed necessary to correct or control the specific situation. When the required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentrations of H_2S, proceed to the following steps, as appropriate for the site-specific conditions.

C. Alert the public (directly or through appropriate government agencies) that they may be subjected to an atmosphere exceeding 30 ppm of H_2S. Initiate evacuation of those within the exposure area.

D. Contact the Area Manager or first available person on the call list. Notify them of the circumstances and whether or not immediate assistance is needed. The Area Manager should notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the call list, as necessary.

E. Cordon off the exposure area to prevent entry, make recommendations to public officials regarding blocking unauthorized access to the unsafe area, and assist as appropriate. Make recommendations to public officials regarding evacuating the public and assist as appropriate.

F. Notify, as required, state and local officials and the National Response Center to comply with release reporting requirements.

G. Monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry.

H. Return the situation to normal.

4.2.4 Expansion on Immediate Action Plan

The following discussion expands on the emergency actions in the order in which they were previously listed. Ideally, some of these actions, after the first, will be performed simultaneously. There may be situations where actions must be performed in a different sequence from those listed. The employee first knowing about the potential hazard (First Responder) will take the first action(s). Subsequent actions will generally be taken by or assisted by those dispatched to help.

A. Request Assistance if Needed

Any employee who finds himself in an emergency situation involving the escape of hydrogen sulfide gas that would pose a hazard to the public shall notify the Area Manager, or his designated alternate, by the fastest means. The employee will advise the Area Manager, or alternate, of the location and nature of the emergency and the assistance needed. He will also state the actions taken and those he will be taking while waiting for assistance. The Area Manager is directly responsible for requesting the assistance needed. He will also proceed with the appropriate notifications. Please refer to Appendix B of this Plan for a list of emergency telephone numbers.

B. Stop the Escape of Hydrogen Sulfide

Isolate the leak by closing the upstream and downstream valves. If necessary, initiate emergency shutdown (ESD) procedures for the equipment.

C. Alert the Public and Evacuate Those Within the Exposure Area

Alert all persons who are within the exposure area. Refer to the map and list of ROEs in Appendix C. In the event a leak causes a potentially hazardous volume public, notification must be made immediately by the employee who discovers (or arrives first at the leak site) and judges the situation serious enough to require immediate evacuation. If it is determined that the notification proceeding shall not be immediate, the Area Manager is the designated employee to initiate evacuations. Whether by the first person at the scene or by the Area Manager, notification to the public shall be made by the fastest possible means.

In the event that complete or partial evacuation becomes necessary, evacuation must be confirmed by personal observations, which should include repeat visits to the area to confirm that persons have not entered the evacuated area. If evacuation is deemed

prudent, advise persons and/or assist them to leave the area without delay by the fastest, safest route out of the exposure area. In populated areas such as the City of Eunice, evacuations will be conducted by city officials with the aid of Targa employees, if requested.

- First, evacuation should be from the 500 ppm exposure area, giving priority to the downwind position.
- Next, evacuate those within the potential exposure area, giving priority to the downwind position.
- Monitor ambient hydrogen sulfide concentrations in adjacent areas to ensure that any exposed residents are evacuated.
- Always wear a breathing apparatus.

D. Contact the Area Manager

The Targa employee (first responder) responding to or receiving notification of an emergency situation shall immediately proceed to the location and attempt to assess the situation, notify the Area Manager or his relief, and take the following actions:

- Provide the Area Manager with as much data possible concerning the location, the extent of emergency and need for additional assistance.
- Warn others in the area of situation, evacuate if necessary.
- Remain at the site, at a safe distance, and available for communication. Wait for assistance to arrive before attempting to enter into any potentially hazardous area.
- Initiate rescue and first aid as the situation dictates.

E. Cordon off the Exposure Area to Prevent Entry and/or Make Barricade and Evacuation Recommendations

Place barricades outside the area of exposure on all routes to prevent entry into the area. Barricades must be manned by Targa and/or law enforcement personnel to prevent entry. The persons manning the barricades must be equipped with a protective breathing apparatus, hydrogen sulfide measuring devices, and two-way radios or cell phones. Barricades should be placed a safe distance away from the potential exposure area and should be monitored for Hydrogen Sulfide.

Based on all information available and the calculated potential exposure information listed in Appendix B, make recommendations to public officials for the strategic placing barricades, for evacuating the public, and assist as needed. Priority should be given to those areas in the 500 ppm radius of exposure, then the 100 ppm radius of exposure, with consideration given to the wind direction. Proper caution should be used for shifting changes in wind direction.

F. Complete Notifications as Required

Generally, some notifications will have been made under Steps A or D. Any of the following notifications that were not made must be made as soon as possible. Normally the Region ES&H Advisors will complete the agency notifications.

- Complete the chain of notification within the company.
- The local public safety officials not already notified who need to be aware of the situation.
- New Mexico Oil Conservation Division – Notification to the OCD should be made as soon as possible, but must be made no more than 4 hours after a Plan evacuation. A full report of the incident must be submitted to the Division on Form C-141 no later than 15 days following the release.
- Environmental Protection Agency Regional Office.

G. Monitor for Safe Re-entry

As soon as the complete and permanent stoppage of the release is confirmed, begin monitoring evacuated areas for hydrogen sulfide and combustible gas concentrations. Monitor the ambient air in the area of exposure only after following abatement measures, to determine when it is safe for re-entry.

H. Return of the Situation to Normal

No re-entry will be allowed until ambient conditions have been assessed and verified. Communications for re-entry should be coordinated through the Area Manager assuming the role of Field Incident Commander (FIC). When total absence of hydrogen sulfide and combustible gas is confirmed throughout the evacuated area, notify the sheriff's office so that they may be informed of the situation. Advise all parties previously notified that the emergency has ended.

4.2.5 Post-Emergency Actions

In the event this plan is activated, the following post-emergency actions shall be taken in an effort to reduce the possibility of a recurrence of the type of problem that required its activation and to assure that any future activation will be as effective as possible:

- Clean up, recharge, restock, repair, and replace emergency equipment, as necessary, and return it to its original location.

- Critique all actions and procedures, providing additional training to employees if need is indicated. Modify contingency plan, if necessary.

- Review the cause of the emergency and modify operating maintenance and other surveillance procedures, if needed.

- Ensure all agency notifications have been completed and follow-up with any written notification requirements.

- Ensure all previously notified or evacuated persons have been advised that the emergency situation has ended.

4.3 EMERGENCY SHUT DOWN SYSTEM

The Plant, acid gas pipeline and acid gas well have extensive Emergency Shut Down (ESD) and Process Shutdown (PSD) systems designed to isolate and out-going gas and product streams, contain hydrocarbon and H_2S releases, and safely depressurize equipment to flares. There systems are automatically and manually initiated, depending on process conditions. There are manually activated ESD buttons located at exit locations at the Plant and the acid gas well. A diagram is presented in Appendix D.

4.4 NOTIFICATION AND REPORTS

The Plant has various notification and reporting obligations. Some are related to its state air quality permit that is overseen by New Mexico Environmental Department (NMED) as well as well as state and federal spill reporting obligations. In addition to the regulatory obligations noted above, Plant personnel also have internal and external notification and reporting obligations associated with the activation of this Plan.

The New Mexico Oil Conservation Division (NMOCD) will be notified as soon as possible but no later than 4 hours following a release of H_2S requiring activation of this Plan. This shall be followed up with a full report of the incident using the NMOCD's C-141 form, no later than 15 days following the release.

4.4.1 Discovery and Internal Reporting

All Plant personnel who perform operations, maintenance and/or repair work within the Plant, acid gas pipeline and acid gas well must wear H_2S monitoring devices to assist them in detecting the presence of unsafe levels of H_2S. When any personnel, while performing such work, discovers a leak or emission release they are to attempt to resolve the issue as long as H_2S levels remain below 10 ppm. The personal monitoring devices they wear will give off an audible alarm at 10 ppm.

If the response action needed to resolve the issue is more than simply closing a value or stopping a small leak, personnel shall notify the Area Manager, or his designee and convey, at a minimum, the following information:

- Name, telephone number, and location of person reporting the situation; and

- Type and severity of the emergency; and

- Location of the emergency (area/block, mile markers, latitude & longitude, or building), and the distance to surrounding equipment and/or structures; and

- The cause of the spill or leak, name and quantity of material released, and extent of the affected area including the degree of environmental hazard; and

- Description of injuries and report of damage to property and structures; and

- Initiate and maintain a Chronological Record of Events log. This record should record the time, date, and a summary of the event.

If personnel detect H_2S levels greater than 10 ppm either as a result of his/her personal monitoring device or hearing the emergency alarm, Plant operators are to contact their immediate supervisor for assistance and put on the 30-min SCBA for rescue if necessary.

All non essential persons shall be notified of the release and evacuated from the area. Responding operators wearing the SCBAs are to first assist any persons requiring assistance during the evacuation, then attempt to resolve the issue. The Plant operator is then responsible for notifying the Area Manager or his designee so that the IC system can be implemented and H_2S Plan activated if necessary.

Once the Area Manager is contacted, he or his designee is to notify the appropriate corporate management, EHS personnel, Plant emergency response personnel, and advise them of the existing emergency situation. Corporate management will then conduct the reporting up that is necessary based on the situation.

Plant personnel are to advise any contractor, service company, and all others on-site or attempting to enter the Plant that the H_2S Plan has been activated.

4.5 PUBLIC AWARENESS AND COMMUNICATION

Public awareness and communication is a primary function of the H_2S Plan. The Company has compiled a list of various public, private, state and local contacts that are to be notified at various phases during the activation of the Plan. Refer to the Emergency Notification List in Appendix E that indicates when certain entities are to be contacted in event of activation of this Plan.

Company will inform all state and local response organizations of its Plan as well as those businesses that fall within its 500-ppm and 100-ppm ROE as illustrated in Appendix C.

4.5.1 Public Areas, Nearby Businesses and Residents

The contact information for local and state agencies and contractors is contained in Appendix F. All entities within the 500 ppm and 100 ppm radius of exposure will be contacted by Plant personnel as designated by Area Manager if the Plan is activated and based on response level as described in the Immediate Action Plan and advised of the following:

- The nature and extent of the release/emergency at the Plant, acid gas pipeline or acid gas well and recommendations for protective actions, such as evacuation or shelter-in-place;
- Any other event specific information that is necessary to protect the public; and
- Updates as to the status of the release and continued safety measures to be taken, including but not limited to when to evacuate and/or when it is safe to return to the area.

4.5.2 Residences or Public Roads

Public County Road 176 and HWY 18 are within the 100 ppm radius of exposure, along with several county and lease roads. Several residences are included within the 100 ppm radius of exposure.

4.5.3 Businesses or Other Public Areas

All businesses included within the ROE will be provided with a copy of the H_2S Plan and will be contacted about participation when local emergency response training events or drills occur.

Due to the overlapping nature of the radius of exposures for the plant, pipeline and acid gas well, all residences, manned and unmanned businesses and producers will be notified if the Plan is enacted.

4.6 SITE SECURITY

A. In order to have an accurate listing of all personnel on-site in the event of an emergency, a daily sign-in log sheet shall be utilized. The sign-in log sheet shall include at a minimum the person's name, the company name, the time of arrival, and the time of departure.

B. The Incident Commander shall be responsible to assure that all personnel sign-in upon arrival and sign-out upon departure from the job site.

C. The Incident Commander may at his discretion assign the responsibilities for the daily sign-in log sheet to the individual designated as the Record Keeper or another designee.

D. At the discretion of the Incident Commander, a security coordinator and/or a security team may be established, and the access to the job site restricted.

E. Road blocks will occur as outlined in the Response Level detail for the Plant, road crossing, pipeline, or acid gas well sites.

4.7 SIGNS & MARKERS

The Plant, acid gas pipeline and acid gas well have numerous warning signs indicating the presence of H_2S/Poisonous Gas and high pressure gas at the entrance to the Plant, along the pipeline right away, acid gas well and road crossings. Emergency response phone numbers are posted at the entrance to the Plant and acid gas well. Acid gas pipeline markers also include emergency response numbers.

Signs are located at the Plant and acid gas well gate entrances indicating that all visitors are to sign in at the Plant office.

4.8 FIRST AID STATION

The first aid station will be located at the Emergency Assembly Area.

FIRST AID KITS are located:
Plant Office Building **Maintenance/Safety Office Building** **Each Company Vehicle**

4.9 MEDIA SITE

At no time shall any unescorted representative from the media be allowed any closer to the Plant, acid gas pipeline, or acid gas well than cold zone location, unless approved by the Incident Commander and the Safety Officer has approved their entry.

Media personnel shall not be allowed to enter Targa Midstream property without the approval of Targa Midstream Area Manager or his designee, and shall be escorted by Targa Midstream personnel at all times.

All media inquiries should be directed to Corporate Communications in Houston. The FIC or his designee will provide Corporate Communications with periodic updates and will take their direction with regard to any onsite communication with the media.

5. TRAINING/DRILLS/EDUCATION

5.1 TRAINING

Targa recognizes that the most critical portion of this plan is Emergency Procedures. To ensure the most effective implementation of these procedures, pre-emergency measures shall be completed to attain a state of preparedness. These actions are as follows:

- Every employee is to be completely familiar with the contents and location of the contingency plan.
- Surveillance and preventative maintenance to minimize the possibility of an accidental release of gas.
- Training and drills will be conducted as further described below.
- All emergency breathing equipment is maintained and ready for use.
- This Plan is made available to appropriate public response officials and shall be reviewed and discussed thoroughly with the City of Eunice emergency response officials.
- Targa will use brochures, public notices, or other means, as deemed appropriate and practical, to alert and educate any persons who reside within the potential areas of exposure.

All training records for the Plant are maintained at the Plant. The following is a limited list and summary of the training programs that relate to the H_2S Plan and Emergency Response:

Plant Orientation Training - All Plant personnel, visitors, and contractors must attend a Plant overview orientation prior to obtaining permission to enter the Plant. A refresher course on this training is required annually for all persons. This training also complies with the requirements of the Targa Safety Standards Manual.

Hydrogen Sulfide and Sulfur Dioxide Training – All Plant personnel receive annual refresher training on hydrogen sulfide and sulfur dioxide, which is conducted by the Targa Training Group. If an individual is unable to attend, they may be required to attend a third party training session. All contract employees and visitors are required to have had hydrogen sulfide training and to provide the Plant a copy of their certification card prior to obtaining permission to enter the Plant.

Respirators - All Plant personnel are trained annually on the proper use of SCBA respirators. In addition to the annual training, all Plant personnel are fit tested annually on the respirators per OSHA Rules.

Hazard Communication - All Plant personnel are trained annually on Hazard Communication and SARA Title III Right-to-Know information. The annual training includes, at a minimum, a review of material safety data sheets (MSDS) for those materials that are present at the Plant and labeling.

Personal Protective Equipment (PPE) - All Plant personnel are trained annually on the Targa requirements for personal protective equipment (PPE). The training includes, at a minimum, a review of all the types and levels of personal protective equipment and how to select the correct equipment for the job.

5.2 EMERGENCY RESPONSE DRILLS

The Plant will conduct, at least, a tabletop drill annually. Multiple drills during the year may be scheduled at the discretion of the Area Manager or as part of the Emergency Response Agencies.

The annual drill will exercise this Plan and include, at a minimum, contacting the entities that are identified as being within the 500-ppm ROE and the Local Emergency Response contacts. The drills will also include briefing of public officials on issues such as evacuation or shelter-in-place plans.

Drill training will be documented and those records will be maintained at the Plant. The documentation shall include at a minimum the following:

- Description or scope of the drill, including date and time;
- Attendees and Participant to the drill;
- Summary of activities and responses; and
- Post drill de-brief and reviews.

Appendix A — *H_2S Plan Distribution List*

New Mexico Oil & Gas Conservation Division

New Mexico Department of Public Safety

Eunice Fire Department

Lea County LEPC

Eunice Police

Eunice Gas Plant Supervisors

Control Room

Acid Gas Well Building and Location

Targa Midstream Office (Midland, TX)

The formulas for calculating the two ROEs (as specified by OCD Rule 118, Pasquill-Gifford Equation) are as follows:

500-ppm RADIUS OF EXPOSURE CACULATION

$$X = [(0.4546)(\text{hydrogen sulfide conc.})(Q)]^{(0.6258)}$$

100-ppm RADIUS OF EXPOSURE CACULATION

$$X = [(1.589)(\text{hydrogen sulfide conc.})(Q)]^{(0.6258)}$$

Where:

X = Radius of exposure in feet

Hydrogen Sulfide Concentration = Decimal equivalent of mole or volume fraction of hydrogen sulfide in the gaseous mixture

Q = Escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees Fahrenheit)

- For existing facilities or operations, the escape rate (Q) is the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof. For the Eunice Plant, after the installation of the AGI well, the Company is using for contingency planning purposes an "escape rate" equal to the anticipated (maximum) inlet gas volume of 5,000 MCFD. The (actual) inlet gas volume at the Plant will be somewhat variable and is continuously metered. The assumed 5,000 MCFD inlet gas volume has been selected as the "escape rate" because it is the highest anticipated inlet volume that the Plant would handle under its proposed operations and is considered worst case interpretation of the volume of gas. It should be noted that the plan will remain effective as long as the processed volume and H_2S content equate to the same ROE. As addressed below.

- As to hydrogen sulfide concentration of the inlet gas, daily monitoring data of current operations indicates variable concentrations, but concentration will not exceed 150,000 ppm or 15 mole percent. Therefore, 150,000 ppm or 15 mole percent has been used in the worst case scenario for the expanded operations with the AGI well for contingency planning purposes.

Using:

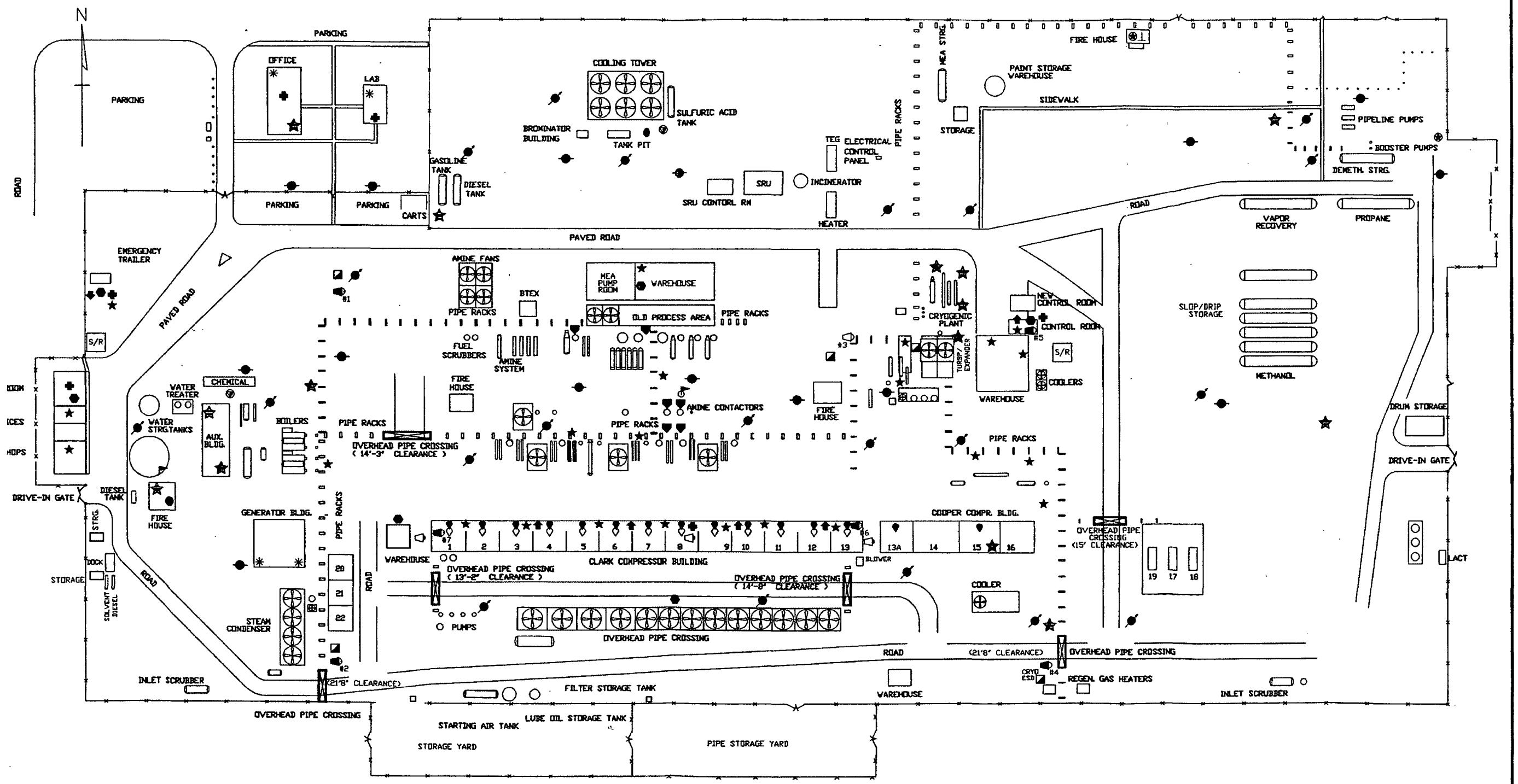
Q = 5,000,000

H_2S conc = 150,000 ppm or 15 mole%

500-ppm ROE = 2900 feet

100-ppm ROE = 6346 feet

EUNICE PLANT EMERGENCY & PREPARATION PLAN



EMERGENCY TELEPHONE NUMBERS

EUNICE PLANT	575 394-2534
PLANT MANAGER Gary Maricle	575 602-6005 (CELL)
FIELD SUPERVISOR CHUCK TOLSMA	575 631-6026 (CELL)
OPERATIONS SUPERVISOR FRANK BRAINARD	575 631-0420 (CELL)
OFFICE ADMINSTRATION Jennifer Jones	575 394-2534 EXT. 222
FIRE DEPARTMENT	911 OR 394-2111
SHERIFF	911 OR 394-2020
POLICE	911 OR 394-2112
STATE POLICE	911 OR 392-5588
AMBULANCE	911 OR 394-2112

EMERGENCY EQUIPMENT LEGEND

- SHUTDOWN STATION
- FIRE EXTINGUISHER – DRY CHEMICAL
- FIRE EXTINGUISHER – CO2
- WHEEL UNIT FIRE EXTINGUISHERS – DRY CHEMICAL
- FIRE PUMP
- HYDRANT
- FIRE MONITER
- FIRST AID KIT
- SHOWERS & EYEWASH
- FIRE BLANKET
- EMERGENCY SIRENS
- EMERGENCY ALARM SWITCH
- FIRE DETECTOR
- GAS DETECTOR
- H_2S GAS DETECTOR
- WIND SOCK
- S/R SMOKE ROOM
- SELF-CONTAINED BREATHING APPARATUS

COMPANY PERSONNEL

Call the following persons in the order listed until one is notified of the emergency:

1. Area Management

Eunice Plant

Gary Maricle, Eunice Area Manager
Office 575-394-2534, ext. 226 Eunice, NM
Mobile 575-602-6005

Alternate:
Frank Brainard, Eunice Operations Supervisor
Office 575-394-2534, ext. 229
Home none
Mobile 575-631-0420

Alternate:
Chuck Tolsma, Eunice Field Supervisor
Office 575-394-2516, ext. 327
Home 575-631-1846
Mobile 5 75-631-6026

Alternate:
Tim Jordan, Saunders Plant Area Manager
Office 575-396-3221 Lovington, NM
Home 575-396-0189 Lovington, NM
Mobile 575-631-7091

Alternate:
Todd Young, Area Manager
Office 575-393-2823 ext. 234
Home 432-523-3770 Andrews, TX
Mobile 575-441-1645

2. ES&H Group

Cal Wrangham, ES&H Manager
Office 432-688-0542 Midland, TX
Home 432-697-6580 Midland, TX
Mobile 432-425-7072

Rebecca Woodell, ES&H Compliance Specialist
Office 575-394-2534, ext. 239 Eunice, NM
Home 575-394-2280
Mobile 575-631-7085

Cindy Klein, ES&H Compliance Specialist
Office 575-396-3221, ext. 38
Home 575-398-6670
Mobile 575-631-7093

3. Region Manager

Clark White, Permian Basin Region Manager
Office 713-584-1525 Houston, TX

4. Field Operators

Eunice Area
Doyle Mapp 575-631-7064
Roger Holland 575-631-7094
Robert McBee 575-631-7061

Call company support personnel in Houston, TX, as needed:

Assistant V-P ES&H
Jessica Keiser 713-584-1084
Cell Phone 713-263-4537

Corporate Security
Weldon Green 713-584-1301
Cell Phone 281-802-5351

LAW ENFORCEMENT AND EMERGENCY SERVICES

STATE POLICE New Mexico 575-392-5588

LOCAL AGENCIES FOR LEA COUNTY

Eunice – Police	575-394-2112
Eunice – Fire Dept.	575-394-3258
Hobbs - Sheriff	575-396-3611
Hobbs – Police	575-397-9265
Hobbs – Fire Dept.	575-397-9265
Hobbs – Ambulance	575-397-9265
Lovington – Sheriff	575-396-3611
Lovington – Police	575-396-2811
Lovington – Fire Dept	575-396-2359
Lovington - Ambulance	575-396-2811

STATE AGENCIES

Oil Conservation Division, Santa Fe	505-476-3440
Oil Conservation Division – District Office, Hobbs	575-393-6161
Environmental Department – Air Quality Bureau, Santa Fe	505-827-1494

FEDERAL AGENCY

U. S. EPA – Region VI Office, Dallas, TX	800-887-6063

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

Excel Energy - Customer Service	800-895-4999 24 hour
Kay and Company	806-592-3513

WATER SERVICE AND VACUUM TRUCKS

Chaparrel Services – Eunice, NM	575-394-2545 24 hour
Danny's Hot Oil	575-398-3490
Gandy Corporation – Lovington, NM	575-396-4948 24 hour
Key Energy Services – Hobbs , NM	575-397-4994 24 hour

ROUSTABOUT CREWS

Flint Energy Services – Odessa, TX	432-332-0687 24 hour
Gandy Corporation – Lovington, NM	575-396-4948 24 hour
B & H Construction - Eunice, NM	575-934-2588 24 hour

DIRT WORK EQUIPMENT

B & H Construction – Eunice, NM	575-394-2588 24 hour
EDW Construction – Hobbs, NM	575-391-7814 24 hour
EKB Welding – Monument, NM	575-361-7078 24 hour
Ferguson Construction – Lovington	575-396-3689 24 hour
Gandy Corporation – Lovington, NM	575-396-4948 24 hour

WELDERS

EKB Welding – Monument, NM	575-361-7078 24 hour
Flint Energy Services – Odessa, TX	432-332-0687 24 hour
B & H Construction – Eunice, NM	575-394-2588 24 hour

SAFETY EQUIPMENT

Total Safety Equip. – Hobbs, NM	575-392-2973 24 hour

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK OR CASH

I hereby acknowledge receipt of check No. _____ dated 3/8/11

or cash received on _____ in the amount of $ 100.00

from Targa Midstream Services

for GW-344

Submitted by: Lawrence Romero Date: 3/9/11

Submitted to ASD by: Patricia Romero Date: 3/9/11

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2010

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

TARGA

Targa Midstream Services Limited Partnership
6 Desta Drive, Suite 3300
Midland, TX 79705
432.688.0555

www.targaresources.com

March 8, 2011

Glenn von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

(FEDEX No.: 7968 1123 4465)

RECEIVED OCD
2011 MAR -8 A 10:57

Re: Targa Midstream Services L.P.
Discharge Permit Renewal
South Eunice Compressor Station (GW-344)
Lea County, New Mexico

Dear Sir,

Targa Midstream Services, L.P. (Targa) requests renewal of the South Eunice Compressor Station Discharge Permit (GW-344) as required by WQCC 3106.

Enclosed are the forms and documentation required by the New Mexico Oil Conservation Division (NMOCD). Please note a $100.00 filing fee (CK Associates for Targa; Check #1181) is included with this Discharge Permit Renewal Application. A copy of this letter and all associated forms and documentation has been sent to the NMOCD Region 1 Office in Hobbs, New Mexico.

Targa is submitting this renewal application with the information required under the "current template". Targa understands that the "current template" is the subject of legal challenge and that this renewal application is being submitted subject to that challenge and without waiving any rights or position that Targa may have.

If you or your staff have any questions or require additional information, please contact me at (432) 688-0542.

Regards,

Cal Wrangham
ES&H Manager
Targa Midstream Services L.P.

Enclosures as stated.

Cc: Larry Hill

(FEDEX No.: 7944 7391 1891)

District Supervisor
NMOCD Region 1 Office
1625 N. French Drive
Hobbs, New Mexico 88240

TARGA

SOUTH EUNICE COMPRESSOR STATION
LEA COUNTY, NEW MEXICO

DISCHARGE PERMIT RENEWAL APPLICATION
NMOCD PERMIT NO: GW-344

MARCH 2011

PREPARED BY:

C-K ASSOCIATES • LLC
616 FM 1960 WEST, SUITE 575
HOUSTON, TEXAS 77090
(281) 397-9016

C-K ASSOCIATES PROJECT NUMBER 5904W

TABLE OF CONTENTS

1.0 Introduction

This Discharge Plan has been prepared for the South Eunice Compressor Station (facility) in accordance with Title 20 Chapter 6.2 Section 3106 New Mexico Administrative Code (NMAC) as part of the renewal application for Discharge Permit GW-344. The current permit issued May 16, 2006, expires on May 16, 2011 and is included as **Appendix A**. The Plan provides information regarding any potential discharges onto or below the surface of the ground. The New Mexico Oil Conservation Division (NMOCD) Discharge Plan Application is included as **Appendix B**.

Targa Midstream LP (Targa) is submitting this renewal application with the information required under the "current template". Targa understands that the "current template" is the subject of legal challenge and that this renewal application is being submitted subject to that challenge and without waiving any rights or position that Targa may have.

The facility is a natural gas compression facility, North American Industrial Classification System (NAICS) 211112. The landowner is Versado Gas Processors LLC and Targa Midstream Services LP (Targa) is the operator of record.

Facility Name:	South Eunice Compressor Station
Owner:	Versado Gas Processors LLC
Operator:	Targa Midstream Services LP
Home Office Address:	1000 Louisiana Street, Suite 4700 Houston, Texas 77002 713-574-1000
Local Address:	PO Box 1909 Eunice, New Mexico 88231
Location of Facility:	SW 1/4, SW 1/4, Section 27, Township 22 South, Range 37 East; Lea County, New Mexico
Landowner:	Versado Gas Processors LLC PO Box 1909 Eunice, NM 88231 Phone 575-394-2534
Name and Title of Facility Responsible Person:	Gary Maricle Eunice Are Manager
Phone Number of Responsible Person:	575-394-2534 ext: 226 Office 575-602-6005 Cell
Hours of Operation	Continuous – 24 hours/day

The facility is located 5 miles south of Eunice, Lea County, New Mexico on Highway 207. The site location is included in the Vicinity Map as **Figure 1**.

2.0 Facility Details and Process Description

The South Eunice Compressor Station is designed to compress raw field natural gas (green gas). The facility is un-manned and operates 24 hours per day 7 days per week. There are a total of two natural gas fueled engine compressor units with a total operating engine power of approximately 4,000 horsepower. The facility currently has an average daily throughput of 20-25 MMSCFD of natural gas.

Targa uses aboveground storage tanks for hydrocarbon and chemical storage. For each storage tank the material of construction is compatible with the material stored and the designed use of the tank. For each tank the container ID, material stored, material state, container type, volume, and content are listed in the storage tank summary (**Table 1**).

A facility diagram is included as **Figure 2**. The facility diagram depicts locations of discharges, storage, disposal, processing, facility boundaries and other relevant areas.

3.0 Materials Stored and Used at the Facility

Materials used at this facility for operational purposes are stored in aboveground storage tanks and are summarized in **Table 1.** MSDS for each chemical stored are on file at the facility and included in **Appendix C**. The location of all storage tanks are shown in **Figure 2**.

The following list details products and chemicals stored and used at the facility:

Hydrocarbons

Condensate, lubrication oil, and oily wastewater are present, as well as products and by-products from operations at the facility.

Detergents and Soaps

Detergents/soaps are used at the facility for equipment cleaning purposes.

4.0 Sources of Effluent

Effluent and waste solids generated at this facility are temporarily stored in aboveground storage tanks or in a below-grade tank in accordance with applicable state and federal regulations. Major effluent sources, estimated source quantities, and types and volumes are listed in the waste stream summary (**Table 2**).

Wastewater liquids are sent to a 300 bbl oil-water separator (T1) located within the tank battery near the south border of the facility. Separated oil flows to two 210 bbl aboveground storage tanks (T2 and T3) and mixed with condensate. Separated water is sent to a bullet tank for storage prior to being trucked and injected in the Class II injection well at Eunice Gas Plant.

All wastes generated at the facility are intentionally not discharged on site to avoid them coming into contact, directly or indirectly, with groundwater. The following are types of effluent sources and waste solids generated at the facility:

Truck, Tank and Drum Washing

During tank washing solids are removed by vacuum truck and disposed of by a third party company.

Steam Cleaning of Parts, Equipment, and Tanks

Solid waste from parts, equipment, and tank cleaning are disposed of offsite by a third party disposal company.

Waste Slop Oil

Waste slop oil from facility operation is collected within the sump system and liquids are sent to the oil water separator. Oil is gravity separated from water and sent to oil storage tanks, where the separated oil is combined with condensate. The condensate is transported offsite for sale by a third party company.

Used Lubrication and Motor Oil

Used oil includes lubrication oil from engine and compressor operation. Used oils are collected in portable tanks and transported to the condensate storage tanks, where the used oil is combined with condensate. The condensate is transported offsite for sale by a third party company.

Used Engine Oil Filters

Used engine oil filters are drained, allowed to dry, and collected in a waste container. All used filters are disposed of by Waste Management of SE New Mexico at the Lea County Landfill.

Solids and Sludges from Tanks

Solids and sludges from tanks include oil sludges, sand, and dirt. The removed solids are disposed of offsite by a third party disposal company.

Sewage

Sewage from the control room and other buildings is sent to an underground septic tank. The sewage water is a combination of "black" and "gray" water from toilets and sinks, respectively. Toilets and sinks are the only sewage sources at the facility.

The septic system does not process more than 2,000 gallons per day of wastewater; therefore is not classified as a Class V wells according to Title 20 Chapter 6.2 Section 5005 NMAC. Treated water from the septic system is sent to lateral lines in a buried leach field at the facility.

Separators and Scrubbers

Oily waste water from natural gas separation is sent to the oil-water separator. Oily liquids are separated and sent to a waste oil tank as condensate. The condensate is then transported offsite for sale to a third party company.

Process and Storage Equipment Wash Down

Equipment wash down liquids are collected within the sump system and routed to the oil-water separator.

Used Engine Coolants

Antifreeze is used as an engine coolant at the facility. Antifreeze is re-used at the facility.

Used Steel Drum

Used steel drums are returned to vendor. Empty drums are stored in the drum storage area on the east of the Plant until they are picked up by the vendor.

Contaminated Rainwater within Secondary Containment

Any contaminated rainwater in secondary containment areas is vacuumed or pumped from the containment and sent to the oil-water separator. Oily liquids are sent to condensate/oil storage tanks, where they are combined with condensate. The condensate is transported offsite for sale by a third party company.

Soil Contaminated with Hydrocarbons

Soils contaminated with hydrocarbons are collected in roll-off storage containers. The soil is then disposed of by a third party disposal company.

Universal Wastes

Domestic solid wastes generated at the facility from offices/facility operation are collected and disposed of by municipal services.

Other Waste Liquids

There are no other waste liquids generated at this facility.

Other Waste Solids

There are no other waste solids generated at this facility.

Commingled Wastes

Commingling of unlike substances does not occur at the facility. Mixing of similar liquids such as RCRA exempt wastes does occur. Oily liquids are not mixed with RCRA exempt wastes.

5.0 Current Liquid and Solid Waste Collection/Storage/Disposal Procedures

Targa has a waste management plan (**Appendix D**) for the facility. Onsite collection, storage and disposal systems for each effluent source listed in **Section 4.0** have been summarized in **Table 2**.

Collection and Storage Systems

A collection and storage system is in place to process and handle waste liquids from separation and operations at the facility. Potential water contaminants used and stored at the facility include:

- Pipeline liquids
  Liquids separated from the natural gas stream including condensate and saltwater.
- Operational Liquids
  Liquids including used lubrication oil, waste water and raw sewage.
- Equipment Wash Down Liquids
  Liquid wastes including solvents, degreasers, soaps and oily water from operational equipment.

Tankage and Chemical Storage

The facility has multiple potential spill sources. A summary of storage tanks and associated secondary containment is included as **Table 1**. All secondary containments are designed to contain one-third more than the total volume of the largest tank.

The storage tanks within the tank battery are interconnected with overflow pipes. The tanks have a common offloading line and each tank has a dedicated valve which remains in the closed position unless the tank is being emptied. Only one tank is emptied at any one time.

Buried Transfer Lines

The facility contains above and below ground transfer lines. Oily waste water is drained from the compressors to a below grade sump. The oily liquids are then transferred to the Oil/Water separator by an underground transfer line (see **Figure 2**). Hydrostatic testing of buried transfer line is conducted at least once every five years to demonstrate the integrity of buried transfer lines. Hydrostatic testing has not been conducted since the line was installed in 2009.

Injection Well

A Class II injection well is used to dispose of RCRA Subpart C exempt liquids. This Class II injection well is currently out-of-service. The well is in the process of being permitted and converted into an acid gas injection well. The injection well is identified as API #30-025-21497.

Surface Waste Management Plan

Surface soils contaminated with hydrocarbons are stored in roll-off containments and disposed of by a third party. Land farm treatment is not present at the South Eunice Compressor Station.

Offsite Effluent and Solids Disposal

Effluent streams not disposed of by injection well are disposed of offsite. **Table 2** is a summary of the effluent streams generated onsite. The following information detailing each identified waste stream is listed below:

- General Composition
- Estimated Quantity Generated
- Onsite Collection
- Final Disposition
- Name, Address, and location of offsite receiving facility

Disposal company operating permits are included in **Appendix E.**

6.0 Proposed Permit Modifications

The collection and storage systems at the facility meet the criteria for demonstration of prevention of discharge to groundwater. There are no proposed modifications to the current approved Discharge Permit.

The current out-of service Class II injection well is in the process of being converted to an acid gas injection well. Targa is currently in the process of permitting the acid gas injection well with the NMOCD. This conversion will not include any additional spill sources at the South Eunice Compressor Station.

7.0 Inspection, Maintenance and Reporting

Inspections

Secondary containment designed in accordance with NMOCD requirements provides adequate containment of precipitation which may come in contact with chemicals, etc. Inspections for leak detection are conducted monthly at the facility. In addition, mechanical integrity tests of the metal tanks are described in the facilities SPCC Plan. Routine visual inspections are the primary method for aboveground equipment leak detection at the facility.

Hydrostatic testing which is conducted every five years ensures the integrity of buried piping at the facility. If a leak is detected, appropriate actions, such as unauthorized discharge notifications and spill response procedures, will be taken according to the volume of the discharge.

Unauthorized Discharge Notification

If an unauthorized discharge occurs the following spill notification steps will occur:

Unauthorized Discharge Notification		
Volume	**Contact**	**Notification; Timeframe**
New Mexico Oil Conservation Division		
Major Release *19.15.29 NMAC*		
• Excess of 25 bbl, • Results in a fire, • Will reach a watercourse, • May reasonably endanger public health • Results in substantial damage to property or environment • Excess of 500 MCF or gas • Reasonable detrimental to water or quality standards	New Mexico Oil Conservation Division District Office (NMOCD – Hobbs for Eunice Gas Plant) *575-393-6161*	Verbal information from Form C-141(1); immediately (within 24 hours) upon discovery
Minor Release *19.15.29 NMAC*		
• Excess of 5 bbl (less than 25 bbl), • Excess of 50 MCF (less than 500 MCF)	New Mexico Oil Conservation Division District Office (NMOCD – Hobbs for Eunice Gas Plant) *1625 N. French Drive* *Hobbs, New Mexico, 88240*	Written and Form C-141(1); timely (within 15 days) upon discovery
New Mexico Environmental Department		
Discharge quantity which may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property. *20.6.2.1203 NMAC*		
No Minimum Quantity	New Mexico Environmental Department *505-827-9329*	Verbal; immediately (within 24 hours) upon discovery

(1)Form C-141 is included in ***Appendix F.***

8.0 Spill and Leak Prevention and Reporting Procedures

Secondary Containment Prevention

Secondary containment designed in accordance with NMOCD requirements provides adequate containment of precipitation which may come in contact with chemicals, etc. Spills and leaks are most likely to occur around aboveground storage tanks. All storage tanks, other than fresh water tanks, include secondary containment to prevent a discharge of the storage tank contents. Secondary containment has been designed to contain a volume of one-third more than the largest tank. Secondary containment details are provided in **Table 1**.

Contingency Planning

For areas where secondary containment is impracticable, Targa has a spill contingency plan in place to prevent a discharge from the facility. The contingency plan is included in **Appendix G.** The Spill Contingency Plan lists steps to contain and remove spilled substances or mitigate the damage caused by the discharge such that ground-water is protected or the movement into surface waters is prevented. The Spill Contingency Plan also addresses clean-up of spills at the facility. Notification of unauthorized discharges according to Title 19 Chapter 15.29 NMAC (both major and minor discharges) and Title 20 Chapter 6.2 Section 1203 NMAC are listed in the Spill Contingency Plan.

In the event of a spill, the person(s) on site at the time of the spill will begin countermeasure actions and commit the company's resources as necessary to control, mitigate, and clean up the spill. The source of the spill will be identified and the flow of oil stopped if this action can be done safely. The following is a list of contacts for spill notification:

Contact List and Phone Numbers		
Internal Personnel (to be immediately notified by person discovering spill)		
Name	**Title**	**Telephone**
Gary Maricle	Area Manager	575-394-2534 ext. 226 (office) 575-602-6005 (cell)
Rebecca Woodell	Environmental Representative	575-394-2534 ext. 239 (office) 575-631-7085 (cell)
Outside Verbal Notification (Immediately by the Area Manager)		
Agency		**Telephone**
Lea County LEPC Notification Lea County Sheriff's Office (24-Hr) Lorenzo Velasquez (Emergency Coordinator)		 575-396-3611 575-396-8607
National Response Center		800-424-8802

Contact List and Phone Numbers (cont.)	
Other Emergency Contacts (As Needed)	
Agency	**Telephone**
Ambulance, Police, Other	911
Lea Regional Medical Center 5419 N. Lovington Highway, Hobbs, NM 88240	575-492-5000
Eunice Fire Department 1106 Avenue J, Eunice, NM 88231	575-394-2111 (Eunice Police Dept.)

Spill Response Contactor's for North Eunice Compressor Station		
Contractor	**Location**	**Phone Number**
B&H Maintenance & Construction	Eunice, New Mexico	575-394-2588
Basic Energy	Eunice, New Mexico	575-394-2545
Environmental Plus	Eunice, New Mexico	575-394-3481
Ferguson Construction Company	Lovington, New Mexico	575-396-3689
Flint Energy Services	Hobbs, New Mexico	575-391-8886
Gandy Corporation	Lovington, New Mexico	575-398-4960
Indian Fire & Safety, Inc.	Hobbs, New Mexico	575-393-3093
Key Energy Services	Eunice, New Mexico	575-394-2581
Larson & Associates, Inc.	Midland, Texas	432-687-0901
Southwest Safety Specialists	Hobbs, New Mexico	575-393-3072
Total Safety Equipment Company, Inc.	Hobbs, New Mexico	575-392-2973
Victory Services	Eunice, New Mexico	575-394-0219
Watson Construction	Hobbs, New Mexico	575-391-0537

Precipitation Containment

Drainage skids and secondary containment around some operational equipment are designed to contain liquids which come into contact with operation equipment. Liquids from these catch skids are sent to the oil and water separator.

9.0 Site Characteristics

Research was conducted on the geological and hydro-geological characteristics of the facility and surrounding area. This included location of surrounding water bodies, search of New Mexico Office of the State Engineer (NMOSE) database, United States Geological Survey (USGS) National Water Information System (NWIS) database, United States Department of Agriculture (USDA) National Resource Conservation Service Web Soil Survey database and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) database.

Surrounding Water Bodies

There are no surrounding surface water bodies within one mile of the facility.

Water Wells near Facility

A search conducted within the NMOSE provides information on water wells located within one-quarter mile from the facility. The results found several water wells within one-quarter mile from the facility. NMOSE database results are included in **Appendix H** and summarized in **Table 3**.

Groundwater Characteristics

The USGS has collected groundwater characteristics data for sites in the United States, these sites are list in the NWIS database. A search was conducted and groundwater data was summarized from sites near the facility which are likely to be affected by a discharge. **Table 4** summarizes the search results which are included in **Appendix H**.

Lithology

The USDA Natural Resource Conservation Service Web Soil Survey Database lists types of soil found in the area surrounding the facility. **Table 5** lists the characteristics of the soil types of the soils, surrounding the facility. Detailed soil descriptions are included in **Appendix H**.

Aquifers

The NMOSE identifies the Capitan Underground-Water Basin as the primary aquifer found in the Eunice area. The NMOSE states that "the aquifer covers approximately 1,100 square miles and occupies south-central portion of Lea County. The aquifer occurs within dolomite and limestone deposited as an ancient reef".

Flooding Potential

The topography surrounding the facility is generally flat. Storm water regionally flows to the southeast. A search of the FEMA FIRM database has not mapped the area surrounding the location of the facility. The FIRM is included in **Appendix H**. The FIRM mapping system identifies areas with the potential for flooding. The FIRM indicates that flood hazards are undetermined for the area surrounding the facility, but possible. However, in an area 4.8 miles north of the facility the flood potential is classified as an area of 0.2% annual chance of flooding.

10.0 Other Compliance Information

The South Eunice Compressor Station has been operating under Discharge Permit GW-344 (**Appendix A**) for several years. Unauthorized releases and discharges will be reported to the NMOCD in accordance with regulations 19.15.29 NMAC and 20.6.1203 NMAC. Please refer to the unauthorized discharge notification table in **Section 7.0** of this plan.

TABLES

TABLE 1

STORAGE TANK SUMMARY

Table 1
Storage Tank Summary
South Eunice Compressor Station

Tank ID	Tank Description	Material of Construction	Liquid Type	Volume (gallons)	Secondary Containment Construction	Effective Containment Volume	Required Containment Volume (gallons)
T1	Tank Battery	Welded Steel	Oil Water Separator	11,760	HDPE Liner/Berm	41,901	15,676
T2		Welded Steel	Condensate	8,812			
T3		Welded Steel	Condensate	8,812			
T4	Methanol Tank	Fiberglass	Methanol	750	Concrete	9,371	1,000
T5	Anti-freeze Tank for	Welded Steel	Anti-freeze	1,000	Steel	1,900	1,333
T6	Unichem 7424	Polypropylene	Naptha	220	Polypropylene	482	293
T7	Lube Oil Tank and	Welded Steel	Lube Oil	8,812	Concrete	11,766	11,747
T8	Antifreeze	Fiberglass	Anti-freeze	1,150			
T9	Unichem 7424	Polypropylene	Naptha	220	Fiberglass	481	293
T10	RW-5/MS-28	Polypropylene	Condensate	110	Fiberglass	271	147
T11	Water Storage Tanks	Welded Steel	Produced Water	60,000	Pending[(1)]	--	79,980
--	Bulk Chemical Storage	Welded Steel	Lube Oil	532	Concrete	4,737	710

Note:
(1) Secondary containment for water storage tanks is planned; pending completion of Acid Gas Injection Well Project.

TABLE 2

WASTE STREAM SUMMARY

Table 2
Waste Stream Summary
South Eunice Compressor Station

Effluent Source	Effluent Type	Estimated Quantity	On-Site Collection	Disposal Method	Location
Separation Equipment	Wastewater	Infrequent and varied amounts	AST	Class II Injection Well Eunice Gas Plant	Offsite
Soil Contaminated with Hydrocarbons	Pipeline Leaks, NGL Liquids	Infrequent and varied amounts	Roll-Off Container	Gandy Marley, Inc. CRI, Inc.	Offsite
Used Engine Filters (drained)	Solid Waste	10 filters per month	Waste Dumpster	Lea County Landfill (Waste Management of SE New Mexico)	Offsite
Scrubber Washouts and Tank Bottoms	Oil Sludge, Sand, Dirt	Infrequent and varied amounts	None	Gandy Marley, Inc. CRI, Inc.	Offsite
Plant Trash	Municipal Solid Waste	30 yards per month	Waste Dumpster	Lea County Landfill (Waste Management of SE New Mexico)	Offsite
Maintenance and Construction	Scrap Metal	Infrequent and varied amounts	Staged	Sold to Recycler	Offsite
Septic System	Septic Wastewater and Solids	Infrequent and varied amounts	Septic Tank	Lea County Septic Tank Service	Offsite

Waste Disposal Companies		
Disposal Company	Address	Location
CRI, Inc	4707 W. Carlsbad Hwy.	Hobbs, NM 88241
Gandy Marley, Inc.	PO Box 1658	Roswell, NM 88202
Lea County Landfill	PO Box 4C	Lovington, NM 88260
Lea County Septic Tank Service	1603 S. Landfill Road	Hobbs, NM 88240

TABLE 3

AREA WATER WELLS SUMMARY

Table 3
Water Well Search Results
South Eunice Compressor Station

POD Number	Use	Well Depth (feet)	Depth of Water (feet)	Coordinates Zone	Easting	Northing
Wells without Well Log Information						
CP 00243	Industrial	--	--	13	673281	3582246
CP 00231	Industrial	--	--	13	673288	3581844
CP 00234	Industrial	--	--	13	673288	3581844
CP 00006	Industrial	--	--	13	673288	3581844
CP 00007	Industrial	--	--	13	673288	3581844
CP 00232	Industrial	--	--	13	673288	3581844
CP 00233	Industrial	--	--	13	673288	3581844
CP 00233S	Industrial	--	--	13	673690	3582051
CP 00243S	Industrial	--	--	13	673690	3582051

Notes:
Information provided by the New Mexico Office of the State Engineer: New Mexico Water Rights Reporting System (N.M.W.R.R.S.)

TABLE 4

SUMMARY OF GROUNDWATER CHARACTERISTICS

Table 4
Summary of Groundwater Characteristics
North Eunice Compressor Station

USGS Site Identification Number	DTW[(1)] (feet)	TDS[(2)] (mg/l)	Measurement Date
Groundwater Level Measurement			
322127103102201	61.18	NA	2/22/2006
322100103094501	72.97	NA	2/14/1996
322003103090301	69.85	NA	2/21/1996
322047103071502	29.76	NA	2/14/1996
321948103073601	64.29	NA	2/22/2006
322212103093001	67.06	NA	2/27/1996
Water Quality Measurement			
322446103062501*	NA	2280	10/14/1958

Notes:

(1) Depth of water below land surface.

(2) Total Dissolved Solids (TDS) concentration, as measured.

NA Not Measured, Not Avaliable.

** Site Number 322446103062501 is the closest site to the facility location with water quality data measuring Total Dissolved Solids (TDS).*

TABLE 5

SOIL CHARACTERISTICS

Table 5
Soil Characteristics
South Eunice Compressor Station

Unit[1]	Typical Profile[2]		
	Unit Composition[3]	Soil Type	Depth (inches)
Berino-Cacique loamy fine sands association (15.7%)[4]			
Berino and Similar Soils	50%	Loamy Fine Sand	0-6
		Sandy Clay Loam	6-60
Cacique and Similar Soils	40%	Loamy Fine Sand	0-12
		Sandy Clay Loam	12-28
		Cemented Material	28-38
Midessa and Wink fine sandy loams (5.0%)[4]			
Midessa (ratliff) and Similar Soils	45%	Fine Sandy Loam	0-4
		Clay Loam	4-60
Wink and Similar Soils	40%	Fine Sandy Loam	0-12
		Sandy Loam	12-60
Simona fine sandy loam, 0 to 3 percent slope (40.9%)[4]			
Simona and Similar Soils	85%	Fine Sandy Loam	0-8
		Gravelly Fine Sandy Loam	8-16
		Cemented Material	16-26
Tonuco loamy fine sand (38.4%)[4]			
Tonuco and Similar Soils	85%	Loamy Fine Sand	0-17
		Cemented Material	17-27

Notes :

(1) Soil unit as decribed by the USDA.

(2) Typical soil profile characteristic of a unit of soil.

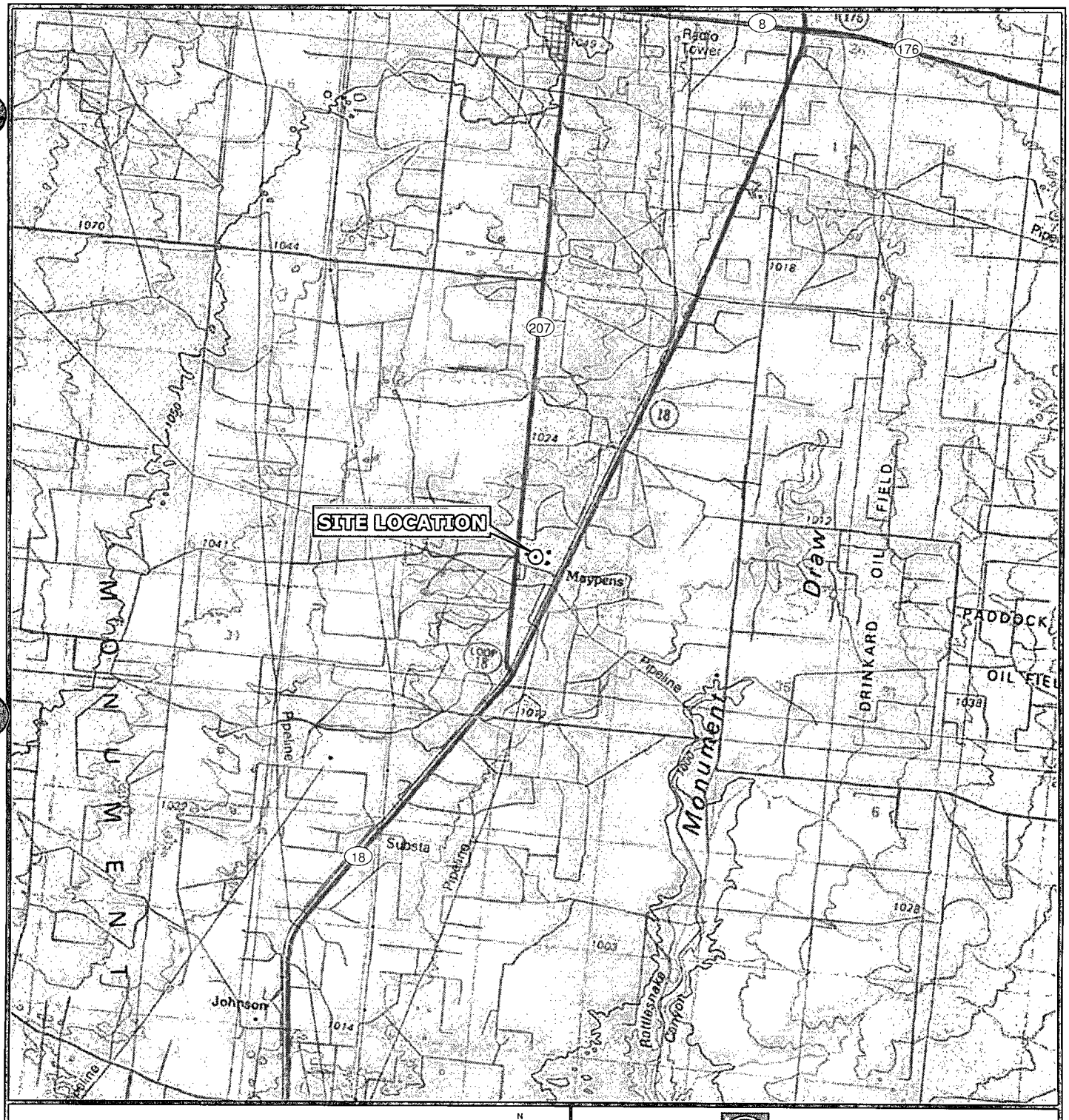
(3) Unit composition typical percentage for the described unit type.

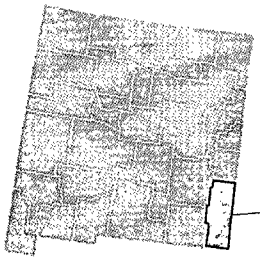
(4) Soil type percentage is determined by the USDA Web Soil Search Database Results for the Area of Interest surrounding the facility.

FIGURES

FIGURE 1

VICINITY MAP





0 3,000 6,000 12,000 18,000

Feet

N

W E

S

Reference

U.S.G.S. 100K SERIES QUAD MAPS, HOBBS AND JAL, NM.

ESRI AUTHORIZED CONSULTANT

TARGA

HOUSTON, TEXAS

SOUTH EUNICE COMPRESSOR STATION

VICINITY MAP

LEA COUNTY, NEW MEXICO

C-K ASSOCIATES, LLC

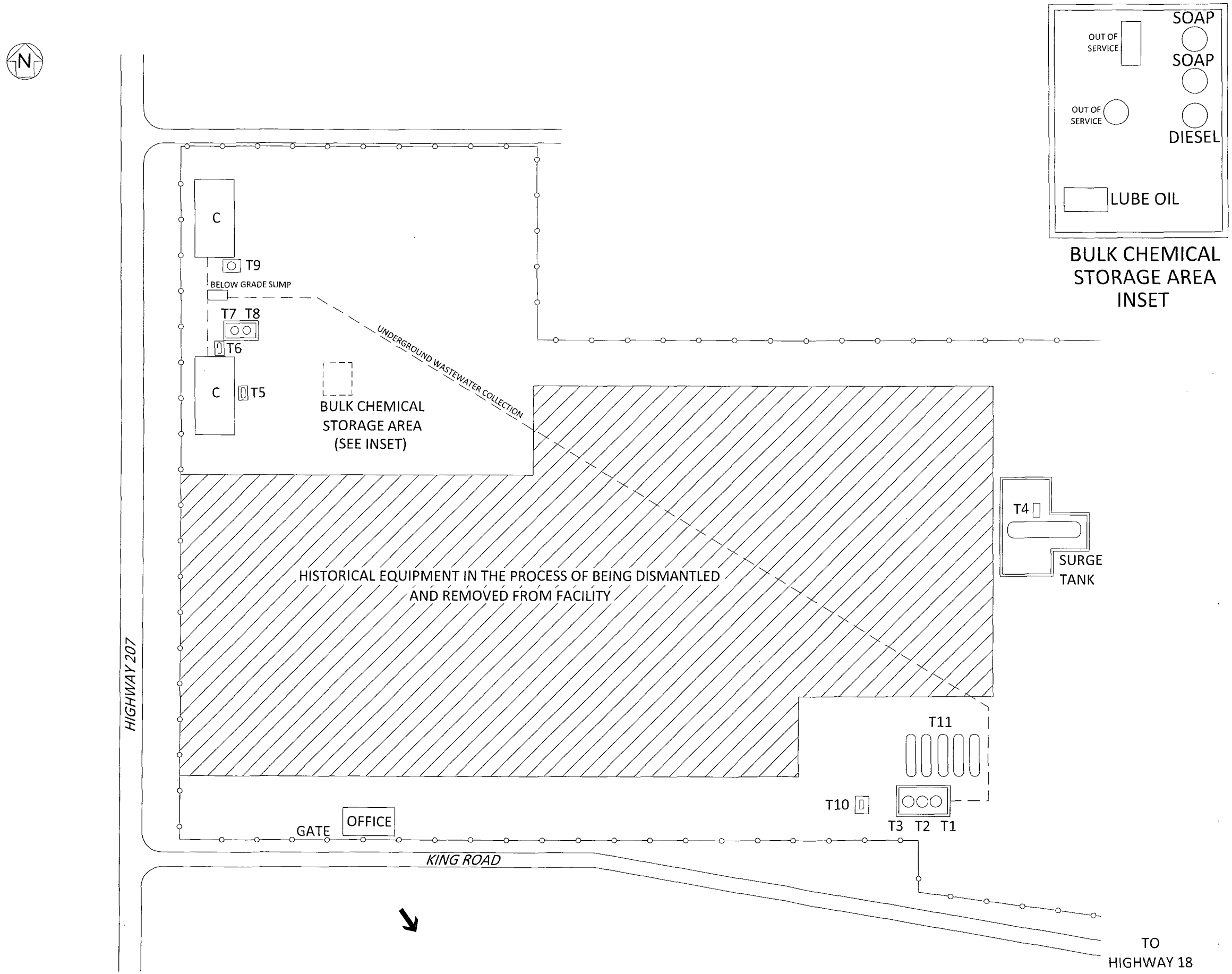
BATON ROUGE, LOUISIANA

Drawn:	CAL/AM9.2
Checked:	JWZ
Approved:	PLM
Date:	10/25/10
Dwg. No.:	A5904W-01

FIGURE 1

FIGURE 2

FACILITY DIAGRAM



BULK CHEMICAL STORAGE AREA INSET

LEGEND

- C — COMPRESSOR
- S — SEPARATOR
- F — FLARE
- FLOW DIRECTION
- FENCE

NOTES:
1 - TANK ID ARE DETAILED IN TABLE 1.
2 - DRAWING IS NOT TO SCALE.

TARGA

HOUSTON, TEXAS

SOUTH EUNICE COMPRESSOR STATION

FACILITY DIAGRAM

LEA COUNTY, NEW MEXICO

Drawn:	CAL/ACAD
Checked:	JMZ
Approved:	PLM
Date:	2/23/11
Dwg. No.:	B5904W-06

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

FIGURE 2

APPENDICIES

APPENDIX A

EXISTING GW-345 PERMIT (ISSUED MAY 24, 2006)

Source:
NMOCD

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

RECEIVED
MAY 26 2006
By

May 24, 2006

Mr. Cal Wrangham
Environmental, Safety and Health Advisor
TARGA Resources, Inc.
6 Desta Drive, Suite 3300
Midland, Texas 79705

Re: Discharge Permit GW-344
Eunice-South Compressor Station

Dear Mr. Wrangham:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the TARGA Resources, Inc., (owner/operator) Eunice-South Compressor Station (GW-344) located in the SW/4 of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/cc
Attachments-1
xc: OCD District Office

Source:
NMOCD

ATTACHMENT TO THE DISCHARGE PERMIT
TARGA RESOURCES, INC., EUNICE-SOUTH COMPRESSOR STATION (GW-344)
DISCHARGE PERMIT APPROVAL CONDITIONS
May 24, 2006

Please remit a check for $1700.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. However, the owner/operator still owes the required $1700.00 renewal permit fee for a compressor station.

2. **Permit Expiration and Renewal:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on July 12, 2011** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its October 31, 2005 discharge permit renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3109.G NMAC addresses possible future modifications of a permit. Pursuant WQCC Regulation 20.6.2.3107.C NMAC, the owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. Pursuant to WQCC Regulation 20.6.2.3109.E NMAC, the Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of

withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. **Above Ground Tanks:** The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. **Labeling:** The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. **Below-Grade Tanks/Sumps and Pits/Ponds.**

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall

retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

Source:
NMOCD

13. **Class V Wells:** The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. **Housekeeping:** The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. **Spill Reporting:** The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. **OCD Inspections:** The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

A. The owner/operator shall correct the following site conditions subsequent to the OCD inspection (see attachment) of January 31, 2006:
   a. Construct secondary containment around chemical tanks;
   b. Close out-of-service brine pond containing brine water; and
   c. Remove and properly dispose and/or treat all oil stained dirt, weeds, etc. within oil treater areas, etc. inside berms.

17. **Storm Water:** The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. **Unauthorized Discharges:** The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***An unauthorized discharge is a violation of this permit.***

19. **Vadose Zone and Water Pollution:** The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. This facility

Source:
NMOCD

is currently under a discharge plan (GW-003) known as the former Texaco Eunice-South Gas Plant. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions:

A. **Gas Plant De-Commission Plan:** The plan shall consist of a detailed description of how the old gas plant will be de-commissioned in order to protect public health, fresh water and the environment.

B. **Waste Management Plan:** The plan shall address how oil field products and wastes will be properly handled, stored, and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect public health, fresh water and the environment.

21. Transfer of Discharge Permit: The owner/operator shall notify the OCD prior to any transfer of ownership, control or possession of a facility with an approved discharge permit. The purchaser shall submit a written commitment to comply with the terms and conditions of the previously approved discharge permit and shall seek OCD approval prior to transfer.

22. Closure: The owner/operator shall notify the OCD when operations of the facility are to be discontinued for a period in excess of six months. Prior to closure of the facility, the operator shall submit a closure plan for approval. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Certification: TARGA Resources, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained herein. **TARGA Resources, Inc.**, further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: **TARGA Resources, Inc.**

Clark White
Company Representative- print name

Clark White
Company Representative- signature

Date 5/31/06

Title VP + Region Manager

APPENDIX B

NEW MEXICO OIL CONSERVATION DIVISION
DISCHARGE PLAN APPLICATION

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS, REFINERIES, COMPRESSOR, GEOTHERMAL FACILITES AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: South Eunice Compressor Station; existing Discharge Permit Number GW-344

2. Operator: Targa Midstream Services LP

   Address: 1000 Louisiana Street, Suite 400, Houston, Texas 77002

   Contact Person: Cal Wrangham Phone: 432-688-0542

3. Location: SE /4 SE /4 Section 27 Township 22 South Range 37 East
   Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.

5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.

6. Attach a description of all materials stored or used at the facility.

7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.

8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.

9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.

10. Attach a routine inspection and maintenance plan to ensure permit compliance.

11. Attach a contingency plan for reporting and clean-up of spills or releases.

12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.

13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Cal Wrangham Title: ES&H Manager

Signature: Cal Wrangham Date: 03/03/2011

E-mail Address: cwrangham@targaresources.com

Targa is submitting this renewal application with the information required under the "current template". Targa understands that the "current template" is the subject of legal challenge and that this renewal application is being submitted subject to that challenge and without waiving any rights or position that Targa may have.

APPENIDIX C

MSDS FOR CHAMICALS STORED AND USED AT THE FACILITY

Product Name: UNICHEM 7424

Section: 01 PRODUCT IDENTIFICATION

BJ CHEMICAL SERVICES
707 N. LEECH
HOBBS, NM 88241-1499
TELEPHONE: (575)393-7751

Emergency Telephone CHEMTREC (800)424-9300
Previous Version Date 8/30/05
Date Prepared 3/12/08
Version: 0000009

Product Name: UNICHEM 7424

Trade Name: Proprietary antifoulant

Chemical Description:
Proprietary blend

Section: 02 HAZARDOUS INGREDIENTS

Component Name	CAS#	% Range
xylene	001330-20-7	< 80%
ethylbenzene	000100-41-4	< 25%

Section: 03 PHYSICAL DATA

Freezing Point: - 40 Deg.F. pH: N/A
Boiling Point, 760 mm Hg: 280 Deg.F
Specific Gravity(H2O=1) : 0.876 Solubility in water: Insoluble
Appearance and Odor: Clear colorless to light yellow liquid; slight amine odor.

Section: 04 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method): 75 Deg.F TCC

Extinguishing Media

CO2, dry chemical, water spray or fog, or foam. Use water to keep containers cool. Isolate "fuel" supply from fire. Contain fire fighting liquids for proper disposal.

Special Fire Fighting Procedures

Do not enter confined fire space without proper personal protective equipment including NIOSH approved self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode. Do not inject a solid stream of water or foam into hot, burning pools; this may cause splattering and increase fire intensity. Evacuate personnel to a safe area. Keep unnecessary people away.

Unusual Fire and Explosion Hazards

This material is volatile and readily gives off vapors that may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other

Product Name: UNICHEM 7424

Section: 04 FIRE AND EXPLOSION HAZARD DATA CONTINUED

ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Containers may explode from internal pressure if confined to fire. Keep containers cool. Keep unnecessary people away.

Section: 05 HEALTH HAZARD DATA

Effects of Overexposure

Eye Contact: may cause conjunctiva irritation.

Skin Contact: may cause irritation, absorption and dermatitis.

Inhalation: may cause dizziness, drowsiness and eye irritation.

Ingestion: may cause throat and stomach burning sensation. Possible pneumonia if vomited.

Medical Conditions Generally Aggravated by Exposure: repeated exposure to any highly toxic material may produce general deterioration of health by an accumulation in one or more human organs.

Target Organs: eyes, skin and lungs.

Emergency and First Aid Procedures

SKIN

Wash with soap and water. Remove contaminated clothing and launder contaminated clothing before reuse. Get medical attention if redness or irritation develops.

EYES

Flush eyes immediately with large amounts of water for at least 15 minutes. Lift lower and upper lids occasionally. Get medical attention.

INHALATION

Remove victim to fresh air. Give artificial respiration if not breathing. If breathing is difficult, administer oxygen. Keep person warm, quiet and get medical attention.

INGESTION

Call a physician immediately. Give victim a glass of water. Do NOT induce vomiting unless instructed by a physician or poison control center. Never give anything by mouth to an unconscious person.

Section: 06 REACTIVITY DATA

Stable (Y=Yes/N=No): Y

Product Name: UNICHEM 7424

Section: 06 REACTIVITY DATA CONTINUED

Stability -- Conditions to Avoid

None known.

Incompatibility (Materials to Avoid)

Avoid contact with strong oxidizing agents, strong alkalies, and strong mineral acids.

Hazardous Decomposition Products

Smoke, carbon dioxide, carbon monoxide, oxides of nitrogen.

Hazardous Polymerization May Occur(Y=Yes/N=No): N

Hazardous Polymerization -- Conditions to Avoid

None

Section: 07 SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled

Eliminate sources of ignition. Persons not wearing suitable personal protective equipment should be excluded from area of spill until clean-up has been completed. Shut off source of spill if possible to do so without hazard. Prevent material from entering sewers or watercourses. Provide adequate ventilation. Contain spilled materials with sand or earth. Recover undamaged and minimally contaminated material for reuse or reclamation. Place all collected material and spill absorbents into DOT approved containers.
Advise authorities. If this product is an EPA hazardous substance (see Section 10), notify the U.S.EPA and/or the National Response Center. Additional notification pursuant to SARA Section 302/304 (40 CFR 355) may also be required.

Waste Disposal Method

Treatment, storage transportation and disposal must be in accordance with EPA or State regulations under authority of the Resource Conservation and Recovery Act (40 CFR 260-271) If product requires disposal, ignitability (D001) would be applicable.

Section: 08 SPECIAL PROTECTIVE INFORMATION

Respiratory Protection

If workplace exposure limit(s) of product or any component is exceeded, an NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure organic vapor type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

Product Name: UNICHEM 7424

Section: 08 SPECIAL PROTECTIVE INFORMATION CONTINUED

Ventilation

The use of mechanical dilution ventilation is recommended whenever this product is used in confined spaces, is heated above ambient temperatures or is agitated. When applicable, sufficient local ventilation should be provided to maintain employee exposures below safe working limits (TWA's).

Protective Gloves

Neoprene, nitrile, polyvinyl alcohol (PVA), polyvinyl chloride (PVC)

Eye Protection

Chemical splash goggles or face shield in compliance with OSHA regulations is advised; however OSHA regulations also permits safety glasses under certain conditions. The use of contact lenses is not recommended.

Other Protective Equipment

Eye wash and safety shower

Section: 09 SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing

Avoid contact with eyes, skin or clothing. Avoid breathing vapors or mist. Keep away from heat, sparks, and open flames and never use a cutting torch on or near container (even empty) or explosion may result. Vapors may travel to areas away from the work site and ignite.

Other Precautions

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Do not transfer to improperly marked container. Do not use pressure to empty container. Do not cut, heat, weld, or expose containers to flame or other sources of ignition. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Containers should be grounded and bonded to receiving container(s) when being emptied. Containers should not be washed out and used for other purposes.
FOR INDUSTRIAL USE ONLY

Section: 10 REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act Of 1986(SARA) Title III

Section 302/304-Extremely Hazardous Substances (40 CFR 355)

SARA requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable

Product Name: UNICHEM 7424

Section: 10 REGULATORY INFORMATION CONTINUED

Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). These values are subject to change and the regulations should be consulted to verify current statutory requirements.

Components present in this product at a level which could require reporting under the statute are:

Component Name	RQ	TPQ	% Range
NONE			

Section 311/312 Chemical Inventory Reporting Requirements (40 CFR 370)

The Superfund Amendments and Reauthorization Act (SARA) may require submission of reports (chemical list, MSDS, Tier I & Tier II) to the State Emergency Response Commission, Local Emergency Response Committee and the local fire department. The SARA physical and health hazards related to this product are:

X Acute Health Hazard	_ Sudden Release of Pressure	X Fire
X Chronic Health Hazard	_ Reactive	

Section 313-List of Toxic Chemicals (40 CFR 372)

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372). This information should be included in all MSDSs that are copied and distributed for this material.

Component Name	CAS #	% Range
xylene	001330-20-7	< 80%
ethylbenzene	000100-41-4	< 25%

CERCLA, 40 CFR 261 AND 302

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center 1-800-424-8802 of any release of a Hazardous Substances equal to or greater than the reportable quantities (RQs) listed in 40CFR 302.4. Values are given in pounds for the component and not the mixture, if applicable. (These values are subject to change and the regulations should be consulted to verify current statutory levels.)

Component Name	CAS #	CERCLA RQ
xylene	001330-20-7	100
ethylbenzene	000100-41-4	1000

OSHA Exposure Limits

Component Name							
xylene							
	TWA ppm:	100.0	TWA MG/M3:	435.0	STEL ppm:	150.0	STEL MG/M3: 655.0
ethylbenzene							
	TWA ppm:	100.0	TWA MG/M3:	435.0	STEL ppm:	125.0	STEL MG/M3: 545.0

Product Name: UNICHEM 7424

Section: 10 REGULATORY INFORMATION CONTINUED

National Fire Protection Agency

2 Health	3 Fire
0 Reactive	____ Other

Department of Transportation Shipping Information

Proper Shipping Name: Flammable liquids, n.o.s.
Hazard Class: 3 Identification: UN1993
Packaging Group: PG III
Contains: xylene, ethylbenzene
Hazardous Substance RQ: 125# Emergency Response Guide Number: 128
Labels: Flammable liquid

Toxic Substances Control Act (TSCA), 40 CFR 261

This product, or components if product is a mixture, is/are listed on the Toxic Substances Control Act (TSCA) inventory.

Section 10 information is to remain attached to the material safety data sheet for this product.

While BJ CHEMICAL SERVICES believes that the above data is correct, BJ CHEMICAL SERVICES expressly disclaims liability for any loss or injury arising out of the use of this information or the use of any materials designated.

END OF MSDS

Product Name: UNICHEM 7424

Section: 11 LABEL INFORMATION

DANGER! FLAMMABLE LIQUID
MAY BE HARMFUL IF SWALLOWED OR INHALED
MAY CAUSE IRRITATION
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES
IN CASE OF FIRE: USE WATER SPRAY, FOAM, DRY CHEMICAL OR CO2
DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.
AVOID BREATHING VAPORS. KEEP CONTAINER CLOSED.
USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

FIRST AID
==========
IN CASE OF SWALLOWING:
CALL A PHYSICIAN IMMEDIATELY. GIVE VICTIM A GLASS OF WATER. DO NOT INDUCE VOMITING UNLESS INSTRUCTED BY A PHYSICIAN OR A POISON CONTROL CENTER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
IN CASE OF CONTACT:
IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES. CALL A PHYSICIAN. FLUSH SKIN WITH WATER. WASH CLOTHING BEFORE REUSE.
IN CASE OF INHALATION:
REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.
==========

CONTAINER HANDLING AND STORAGE:
KEEP CONTAINER TIGHTLY CLOSED. KEEP CLOSURE UP TO AVOID LEAKAGE. DRUM MUST NOT BE WASHED OUT OR USED FOR OTHER PURPOSES. REPLACE CLOSURE AFTER EACH WITHDRAWAL. DO NOT USE PRESSURE TO EMPTY DRUM. DO NOT TRANSFER THIS MATERIAL TO IMPROPERLY MARKED CONTAINER. KEEP OUT OF REACH OF CHILDREN.

IN CASE OF SPILLAGE:
ABSORB SPILL WITH ENERT MATERIALS (E.G., DRY SAND OR EARTH). PLACE IN A CHEMICAL WASTE CONTAINER. FLUSH SPILL AREA WITH WATER SPRAY. FOR LARGE SPILL, DIKE FOR LATER DISPOSAL.

CONTAINER DISPOSAL:
THIS CONTAINER WILL CONTAIN TRACES OF HAZARDOUS MATERIAL WHEN EMPTIED. DO NOT CUT OR WELD ON EMPTY CONTAINER. FOLLOW LOCAL, STATE AND FEDERAL REGULATIONS FOR DISPOSAL.

CALIFORNIA PROPOSITION 65:
THIS PRODUCT CONTAINS ETHYLBENZENE. ETHYLBENZENE IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

APPENDIX D

WASTE MANAGEMENT PLAN

TABLE OF CONTENTS

Targa Midstream Services LP

New Mexico Waste Management Plan

PURPOSE AND SCOPE

The management of wastes generated at gas processing facilities has become increasingly complex; new regulations are promulgated so quickly it is practically impossible to keep up with them. Waste handling and disposal techniques that were acceptable yesterday are no longer allowed today. Facility personnel must comply with a myriad of agency notifications, testing requirements and recordkeeping requirements. This waste management plan is designed to provide guidance in the management of wastes generated at the facility by ensuring their proper storage, transportation, and disposal. Specifically, this plan will provide the following information:

- Waste identification, classification, handling, and disposition.
- Waste minimization and elimination alternatives.
- Information on applicable shipping requirements under the Department of Transportation
- Examples of forms and letters necessary for disposal and reporting requirements.
- Data on how each facility is managing waste and the associated costs.

This information will make it possible to meet the following goals:

- Facilitate proper waste identification and management by plant personnel.
- Involve plant personnel in identifying ways to reduce waste generation.
- Comply with regulatory requirements for developing and implementing a plan to minimize waste generation.
- Increase awareness and provide training to plant personnel.
- Provide a means for inter-facility communication and transfer of technology.

The scope of this plan covers all wastes generated at the facility which meet the Resource Conservation and Recovery Act (RCRA) definition of a "solid waste" and does not include the following:

- Wastes which are discharged into and remain as part of the atmosphere (i.e., fired equipment exhaust, relief valve discharges, flare emissions, incinerator emissions, etc...).

- Wastes which are discharged through an effluent system which is covered under an NPDES or State permit (i.e., boiler and/or cooling tower blowdown, sewage treatment facility effluent, stormwater runoff, etc...).

WASTE MINIMIZATION

The primary emphasis of this Plan is on waste minimization; the reasons for this emphasis are:

1. A congressional mandate,
2. Savings to the company, and
3. Reduction in environmental liability.

Minimization is defined by the U. S. Environmental Protection Agency (EPA) as "the reduction, to the extent feasible, of waste generated prior to treatment." Congress established a national policy declaring the importance of reducing or eliminating the volume of hazardous waste generated as soon as possible. **As a result, industry is required by law to develop waste management plans and reduce the volume of waste generated each year (54 FR 25056-25057).** A second reason for emphasizing waste reduction is the savings to the company. By eliminating a waste stream, it is no longer necessary to

devote resources to the handling, storage, analysis, and disposal of that waste stream. Finally, the environmental liability that a company sustains is reduced each time a waste stream is eliminated.

Corporate policy on waste management options is, by order of preference,

1. reduction,
2. recycle/reuse,
3. treatment (including disposal).

Therefore, plant personnel should continually try to identify and evaluate possible waste management alternatives. Information can be obtained from a variety of sources including trade associations (such as the Gas Processors Association), published literature (from the American Petroleum Institute or industry publications), state and federal environmental agencies, and company personnel. Waste minimization may be something as simple as proper maintenance and operation of equipment to prevent generation of excessive volumes of waste, or using corrosion inhibitors in cooling tower water that do not contain chromium.

RECYCLING & REUSE

In situations where waste elimination or reduction may not be possible, recycling or reusing a material is the next alternative. If a material can be used more than once, the overall volume of material purchased and waste generated is reduced as well as disposal costs. Additionally, some states such as Louisiana require certain wastes be recycled instead of disposed. Finally, the following recyclable materials are excluded from hazardous waste regulation:

- Used oil that is recycled in some other way than burning for energy recovery.
- Scrap metal.
- Used batteries returned for regeneration.
- Materials used or reused as ingredients to make a product.
- Wastes used or reused as effective substitutes for chemical products.
- Wastes returned to the original process from which they were generated.

The latter three are excluded only if the wastes are not reclaimed or treated before reusing (such as distillation, ion exchange, dewatering). A complete guide on recycling can be found in Section 14, How to Recognize a Hazardous Waste.

WHAT IS A SOLID WASTE?

The Solid Waste Disposal Act (SWDA) was enacted in 1965 to regulate the disposal of solid waste primarily at municipal landfills. The SWDA was amended in 1976 by the Resource Conservation and Recovery Act (RCRA) to include more stringent regulations of solid waste and a "cradle to grave" regulation of hazardous waste. Hazardous waste is monitored from the point of generation, through storage, transportation, and final disposal. However, the fundamental principle behind RCRA, as indicated in its title, is to minimize the volume of hazardous waste generated through elimination, reduction, or recycling and reuse of solid and hazardous waste and to avoid land disposal of wastes whenever possible. In an effort to promote waste reduction, land disposal restrictions were authorized when RCRA was amended in 1984. In order to understand the solid and hazardous waste programs some critical definitions must be understood.

A solid waste includes *garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, air pollution control facility, and other* ***discarded*** *material including solid, liquid, semi-solid, or contained gaseous materials, resulting from industrial, commercial, mining and agriculture activities, and from community activities with the exception of domestic sewage, irrigation return flows, or industrial discharges permitted under the Clean Water Act (Title 40 of the Code of Federal Regulations Part 261.2 (40 CFR 261.2)).* A material must first be discarded to become a waste. **Discarded** is defined as "*any material which is disposed, abandoned, recycled or considered inherently waste-like (40 CFR 261.2(a)(2)).*" Several categories of materials are exempt from regulation as solid waste. Two of these exemptions important to the gas processing industry include:

- Industrial wastewater discharges permitted under the Clean Water Act.
- Secondary materials that are reclaimed and returned to the original process from which they were generated.

WHAT IS A HAZARDOUS WASTE?

Hazardous waste is actually a subset of solid waste; discarded material cannot be a hazardous waste unless it first fits the definition of a solid waste. There are two types of hazardous waste as defined in RCRA (40 CFR 261.3), 1) characteristically hazardous, and 2) listed hazardous wastes. Wastes that are characteristically hazardous exhibit one of the following four characteristics: ignitability, corrosivity, reactivity, or toxicity. An ignitible waste is any solid, liquid or compressed gas with a flashpoint less than 140° F such as Varsol (40 CFR 261.21). A corrosive waste is any liquid that has a pH less than or equal to 2, or greater than or equal to 12.5 such as spent acid or spent caustic (40 CFR 261.22). Reactive wastes are those that are normally unstable, react violently with water (sometimes releasing hydrogen sulfide (H_2S) or cyanide (CN), if present in the waste, as gases), form potentially explosive mixtures with water, are capable of detonation or explosion reaction if subjected to a strong initiating source or heated under confinement, capable of detonation or explosive decomposition or reaction at standard temperature and pressure, or meets the DOT definition of forbidden explosive (40 CFR 261.23). Cooling tower sludge might be a reactive waste due to its potential to contain hydrogen sulfide. Toxic wastes contain concentrations of regulated metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), organic compounds (26 compounds including benzene and trichloroethylene), and insecticides/herbicides above allowable limits (40 CFR 261.24). For example, soil in meter sheds are sometimes toxic due to elevated concentrations of mercury.

Listed wastes are those which have been identified as "typically or frequently" hazardous because they exhibit a characteristic or they threaten human health or the environment. Listed wastes include material used in non-specific sources such as spent solvents (40 CFR 261.31), from specific processes such as API separator sludge from refining (40 CFR 261.32), commercial chemical products that are off-specification species, or are container or spill residues such as methanol (40 CFR 261.33).

As with the definition of a solid waste there are several exemptions to the definition of hazardous waste. Among the several categories of exempt waste are two that are particularly important, the exclusion of household waste, and the exclusion of drilling fluids, produced waters, and other wastes associated with the exploration, development, and production of crude oil, natural gas, or geothermal energy (known as the petroleum exclusion). The exemption is important because it explicitly states that certain wastes unique to the exploration and production of natural gas and oil are exempt from consideration as a hazardous waste. Therefore, the wastes do not have to be tested to determine if they are hazardous and they can be handled as a solid waste. Many states including Louisiana and Oklahoma have put some limits on the full interpretation of this exemption. In these states, the environmental agencies require these wastes to be tested before they can be disposed in a landfill permitted by that agency. The benefit of this exemption is evident in the disposal of aqueous wastes such as spent amine or cooling tower

blowdown in a Class II disposal well. Because of the complexities, it is important to review the exemption and state requirements (review the memorandum of understanding between the agencies). A copy of the book How to Recognize A Hazardous Waste (Even If Its Wearing Dark Sunglasses) has been included in Section 14 as an additional resource. The book provides an complete analysis of the hazardous waste regulations.

WHO IS A GENERATOR OF HAZARDOUS WASTE?

A generator is "any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation." There are three types of generators of hazardous waste; each category is defined by the quantity of waste generated and has specific requirements that must be met (40 CFR 262).

A large quantity generator (LQG) produces more than 1,000 kilograms per month (kg/mo), or 2200 pounds per month (lbs/mo), of hazardous waste. Large quantity generators must comply with the following requirements:

- Obtain an EPA Identification number.
- Store waste onsite for no more than 90 days.
- Manifest the transport and disposal of each waste shipment and comply with all Department of Transportation (DOT) shipping requirements.
- Wastes must be disposed at RCRA-permitted facilities.
- Comply with specific storage requirements.
- Provide complete training for personnel handling wastes.
- Maintain a complete contingency plan.
- Comply with reporting and recordkeeping requirements.

A generator that produces more than 100 kg/mo, or 220 lbs/mo but less than 1,000 kg/mo of hazardous waste is defined as a small quantity generator (SQG). Generators in this category must comply with the following requirements:

- Obtain an EPA Identification number.
- Store no more than 6,000 kg (132,000 lbs) onsite at any time for up to 180 days or up to 270 days if the disposal site is more than 200 miles away.
- Manifest the transport and disposal of each waste shipment and comply with DOT shipping requirements.
- Wastes must be disposed at RCRA-permitted facilities.
- Comply with specific storage requirements.
- Provide basic training for personnel.
- Maintain a basic contingency plan.

A conditionally exempt small quantity generator (CESQG) produces no more than 100 kg/mo (220 lbs/mo) of hazardous waste or no more than 1 kg/mo (2.2 lbs/mo) of acutely hazardous waste and accumulates no more than 1,000 kg of hazardous waste on site at one time. Conditionally exempt generator's hazardous wastes are not subject to many of the requirements that larger generators must meet. They do not have to obtain an EPA Identification number (although most transporters and disposers will not accept waste without a number), manifest waste shipments, provide training to personnel, maintain contingency plans, or comply with storage requirements. However, they must send their hazardous wastes to disposal facilities authorized to accept that waste (40 CFR 261.5). Generators producing less than 100 kg/mo in Louisiana are termed Small Quantity Generators and are required to

use shipping manifests, comply with recordkeeping and reporting requirements. Texas, Oklahoma, and New Mexico follow the federal program for CESQGs.

STORAGE PRACTICES

Facilities which store waste prior to disposal should follow a few simple best management practices to ensure wastes are stored in an appropriate manner. Following these practices can also reduce environmental liability caused by spills or leaks from storage containers. These practices include the following:

- Store wastes in containers or tanks that are in good condition.
- Containers should be compatible with the material being stored in them.
- Containers should be stored in covered areas and on impermeable surfaces whenever possible.
- Containers should be always be closed unless the contents are being transferred.
- Always label containers, identifying the contents and the start date of accumulation.
- Never allow accumulation of waste onsite longer than is absolutely necessary.
- Inspect storage areas and containers periodically (at least weekly for LQG and SQG) to ensure they are not leaking.
- Replace or repair immediately any container that is leaking.

RECORDKEEPING

Facilities that generate both hazardous and nonhazardous waste should always maintain records that document waste management practices at their facility. Maintaining copies of records serves four purposes. First, large and small quantity generators are required by regulation, for example, to keep copies of manifests for three years. Second, a generator, whether a CESQG or LQG, must maintain copies of records to document compliance with regulations such as waste analysis, classification, storage, transportation, and disposal practices. These records can be requested by a regulatory agency for review when conducting an inspection of the facility. Third, generators may be subject to monthly, quarterly, or annual reporting requirements including information such as type and volume of waste generated, the transporter, and treatment, storage, or disposal site must be provided to state or federal regulatory agencies. Fourth, maintenance of records can help to determine how effectively the goals of the waste management plan are met. The type of records that should be retained include the type and quantity of waste generated; waste manifests, bills of lading, or run tickets; names, addresses, and contact person for transporters and disposers; any results of waste analysis including how and where samples were collected. It is the responsibility of the generator to be sure that transporters and treatment storage and disposal facilities utilized are registered or certified with the appropriate state and/or federal agencies for those activities. This can minimize the possibility of illegal disposition of wastes generated from the facility.

WASTE SAMPLING AND ANALYTICAL PROCEDURES

The majority of states require that facilities sample and analyze some or all wastes generated at a facility. Different states have different requirements on the number and type of samples that must be collected as well as which specific analytical procedures should be used.

Before collecting samples it is important to ask a few basic questions. What parameters am I trying to analyze? What type and quantity of sample do I need? How and where do I collect the sample? What

type of analytical procedure will I use? The answers to these questions will determine how the samples are collected, preserved, and how quickly they must be analyzed. **It is important to coordinate sampling activities with a laboratory prior to sample collection.** Laboratory personnel can provide assistance with these questions and others. They can also provide the proper sample and shipping containers.

When collecting samples, the facility should always follow proper sampling procedures. Always clean and rinse the sampling equipment between sampling locations to prevent cross-contamination of one sample by another. Always place samples in a clean sample containers. Take great care when packing samples for shipment to the laboratory so that containers are not broken or punctured. Always document the sample locations in a field notebook, and be sure to label the sample containers with the sample identification, the time and date collected, and specify the analytical method to be used. Proper chain-of-custody procedures should be followed to be sure samples have not been tampered with while in transit from the plant to the laboratory. If samples are not handled properly, inaccurate analytical data can be the result.

The Environmental Protection Agency has outlined specific analytical procedures that should be performed when testing for specific compounds in SW-846 Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods. Each analytical test method has been assigned a test number which identifies the specific procedure to be used. In many cases, more than one test method can be used to analyze the same compound. For example, total petroleum hydrocarbons can be analyzed using Method 418.1 or Method 8015 Modified. Therefore, it is important to specify the correct analytical method. The specific test methods necessary for testing wastes are included on the Waste Identification Sheets (Section 5).

Section 2 Waste Management Plan Environmental Guidance
Waste Classification

WASTE MANAGEMENT AND CLASSIFICATION

Waste Classification

The Hazardous Waste Management System was promulgated by the EPA in response to requirements levied by the Resource Conservation and Recovery Act (RCRA). This act, as codified in 40 CFR, lists those substances considered as hazardous. It provides lists of chemicals, pollutants, wastes and the like that are to be monitored, reported, controlled, or eliminated, if present in the workplace or the general environment. There is not an all encompassing list that can be used. The Environmental Department does monitor the lists published by the EPA and the hazardous materials as identified in Material Safety Data Sheets (MSDS) received from chemical manufacturers and distributors used by NGC Warren.

Before disposing of used chemicals, solvents, filters, drums, or other solid or liquid wastes, check to be certain that it is not a listed substance or that the MSDS received on the substance does not identify it as hazardous due to its characteristics. Contact the Environmental Department if you are unsure of the category of the waste or if you do not know what the substance is. If you do not recognize the term SQG, you are not alone in that regard. Many firms that generate hazardous waste are not familiar with this term. The law that gave rise to the term, or the multitude of requirements that the government imposes on generators of small quantities of hazardous waste.

Small Quantity Generators

SQG's generate between 100 and 1,000 kilograms (kg) of hazardous waste in any calendar month, which translates to between 220 and 2,200 pounds. That's roughly equivalent to between one-half and five 55-gallon drums, or between 25 and 300 gallons. That amount of hazardous waste monthly is the federal government's definition of a small quantity generator (SQG). Many states' definitions of the SQG are even more restrictive, which is why we have included as much state-specific regulatory information as is practically possible.

Defining a Hazardous Waste

It's likely that your facility uses hazardous chemicals of some kind often easily identified Hazardous as such because the vendors selling them also supply the chemicals' material safety data sheets (MSDSs).

Operations involving such chemicals often result in wastes such as spent chemicals, stained rags, or contaminated filters. When those wastes pose a potential danger to the environment or human health and life, they are considered hazardous wastes.

The regulations focus on four specific dangers. These are:

1. **Ignitability** - the property of being easily set aflame by nearby heat sources;

2. **Corrosiveness** - the capability to bum eyes or skin on contact;

3. **Reactivity** - the tendency for a substance to explode or otherwise react violently if exposed to air, water, or other common substances; and

4. **Toxicity** - meaning poisonous if taken into the body.

Wastes are considered hazardous if they exhibit any of these characteristics or if they appear on certain government lists.

Because they are hazardous, these wastes must be accounted for, constantly tracked and reported on, and handled with "kid gloves," from "cradle to grave" from the point of generation to the moment they are incinerated, treated, recycled, or landfilled.

The law that governs this "cradle-to-grave" tracking system and that imposes requirements on businesses, large and small alike, is called the Resource Conservation and Recovery Act (RCRA). This is also the law under which the category of "small-quantity generator" was created.

To find out if you are subject to the provisions of RCRA, you need to:

Start With The Right Question

Under RCRA, firms whose operations create hazardous waste are classified as one of three types of "generators"— based on the quantity of waste they generate.

The federal government's categories are:

1. Conditionally exempt generator,
2. Small-quantity generator, and
3. Large-quantity generator.

Again, some states have their own categories.

To determine which category of hazardous waste generator your facility falls into and what requirements you must meet you must answer two questions:

1. Is the waste you generate hazardous, under the law? and
2. Knowing the amount of hazardous waste you generate, which of the three compliance categories describes your business?

In determining the amount of hazardous waste generated, it is easy to become confused because the law defines quantity limits expressed in pounds or kilograms, while companies measure their waste in terms of gallons or gallon-rated containers, e.g., drums.The following chart helps you visualize how much waste we are talking about.

Conversion Chart

KILOGRAMS	POUNDS	GALLONS	55 GAL.
100 kilograms	220 pounds	30 gallons	one-half
1,000 kilograms	2,200 pounds	300 gallons	five
6,000 kilograms	13,200 pounds	1,800 gallons	thirty

If You're Unsure if Your Waste is Hazardous

The critical decision of whether your waste is hazardous is based on your special knowledge of the waste. Some wastes such as certain spent solvents are easily classified as hazardous. Yet, other wastes such as solvents that are not readily flammable, oils that may be contaminated with toxic metals, or chemical by-products may have to be tested to determine if they are hazardous.

Generator Responsibilities

It's important to note that under the law, you are presumed to know what your waste contains and are able to support any conclusions you reach. The generator category into which you fall is based on your adding up the weight of all the hazardous wastes your facility generates during the month. The compliance requirements vary markedly depending on how much waste you generate.

Note at this point, however, that the following *are federal* RCRA requirements. Some state requirements vary.

Conditionally Exempt Compliance Requirements (0- 100 kg/month)

The government recognizes that generators of very low quantities of hazardous waste are often smaller firms with limited resources. They have therefore allowed firms that generate between 0 and 100 kg (0 to 220 pounds) of hazardous waste per month to be "conditionally exempt" from certain federal regulations governing hazardous waste disposal, if they fulfill the following requirements:

- Fully identify all hazardous waste they generate;
- Send their waste to a waste facility approved by the state or RCRA-authorized facility; and
- Never accumulate more than 1,000 kg (2,200 pounds) of hazardous waste at any single time.

SQG Compliance Requirements (100-1,000 kg/month)

Those firms that generate between 100 and 1,000 kg (220 and 2,200 pounds) of hazardous waste, however, come under additional regulation by the EPA. Under the federal law, SQGs must:

- Fully identify all hazardous waste they generate;
- Obtain a U. S. EPA Identification Number,
- Send their waste to a hazardous waste facility, or other facility approved by the EPA or state to receive such waste;
- Use a hazardous waste manifest form when shipping waste off-site;
- Offer waste only to a hazardous waste transporter that has a U.S. EPA Transporter Identification Number,
- Comply with applicable Department of Transportation (DOT) requirements for shipping wastes off-site;

- Accumulate waste on-site for no more than 180 days, or 270 days if the waste is being shipped more than 200 miles—unless a hazardous waste storage permit is obtained;

- Never accumulate more than 13,200 lbs (expressed as 6,000 kg in the law) of hazardous waste at any single time; and

- Comply with emergency preparedness requirements.

Large-Quantity Generator Compliance Requirements

The requirements are most stringent if you are a "large-quantity" generator. For those facilities generating greater than 1,000 kg (2,200 pounds or 300 gallons) of hazardous waste per month, you must also:

- Certify on the manifest form that you have a program in place to minimize the volume and toxicity of your hazardous wastes;

- Accumulate waste on-site for no more than 90 days, unless a hazardous waste storage permit is obtained;

- File a biennial report with the EPA and an annual report with the state environmental agency, if applicable;

- Comply with annual RCRA training requirements; and

- Develop and maintain an emergency response "contingency plan."

Under the law any facility that produces or manages a waste must evaluate that waste to determine if It s hazardous.

Are your Wastes Hazardous?

The law's definition of the term "hazardous waste" is quite specific and can be boiled down to one key definition and four words:

A hazardous waste is a discarded substance that is either:

(1) ignitable, (2) corrosive, (3) reactive, or (4) *toxic.*

For example, a hazardous waste can be a solid, liquid, or containerized gas. "Discarded" may mean land-disposed, incinerated, burned, recycled, and even stored. The potential universe of hazardous wastes is limitless. Some substances are mentioned by chemical name. Most are not. Unnamed wastes, such as "spent solvents, "sludges," and "by-products," for example, that exhibit

one of the four hazard characteristics mentioned above, are regulated as hazardous.

First, though, you need to thoroughly understand the issues involved with hazardous waste determination.

Here's the logic you should follow in building that understanding:

- Are You a Typical SQG?
- Have You Conducted a Waste Inventory?
- Have You Assembled Raw Material Data?
- What Exemptions are Available?
- Is the Waste Listed?
- Does the Waste Exhibit a Hazardous Characteristic?
- Are You Obeying all the Rules?

Question 1: Have You Conducted a Waste Inventory?

For most SQGs, the easiest inventory approach is to ask production and maintenance personnel about wastes, tour your production and nonproduction areas, and inspect storage areas and dumpsters.

It is important to identify: (1) what wastes you generate, (2) the quantity you generate, and, ultimately, (3) how you discard the wastes.

To help you to inventory your wastes, use the form found in Section 8 of this manual and list your wastes by name and quantity:

You can then proceed to determine what wastes on the list are hazardous.

Question 2: Have You Assembled Data on Your Raw Materials?

Since wastes usually begin with the raw materials you use, information on those materials will greatly assist you in understanding whether your wastes are hazardous.

Often, the right phone call or a look at the appropriate information sheet may rule out the need to have your wastes analyzed by a laboratory. If the raw material was considered a hazardous substance, the waste it creates will likely be so as well. Hazardous waste characterization information may be available from your trade association, your chemical vendor, or your waste hauler.

Such information may also be available on the material safety data sheets that came with many of the materials. You should receive (or you must generate if you are a chemical manufacturer) and

keep on file an MSDS for every chemical product that you have on your premises for commercial use.

These sheets are invaluable in providing information about the physical, chemical, and toxic properties of the material.

An MSDS can greatly simplify the process of identifying the characteristics of your chemical waste. It can also save you money by eliminating the need for expensive first-time chemical analysis. Be forewarned, however, that you must always scrutinize any MSDS, making sure that the information it contains is accurate and sufficiently detailed. If there is any question, call the supplier listed on the sheet.

At a minimum, an MSDS will give you information on the hazards or risks associated with the hazardous substance. This includes: (a) the potential for, explosion, corrosivity, and reactivity; (b) the acute and chronic health effects resulting from exposure, including any medical conditions that might be aggravated by exposure; (c) the potential routes of exposure via skin, inhalation, ingestion, etc. and (d) the symptoms of overexposure.

The MSDS will also provide a description of the specific potential health risks posed by a hazardous substance. This includes, but is not limited to, carcinogenic (cancer-causing), mutagenic (mutationcausing), teratogenic (fetus-damaging), or neurotoxic (nerve-damaging) effects.

If your waste stream is relatively simple, an MSDS may provide you with all the information you need to determine whether your chemical waste is hazardous.

Some waste cannot be evaluated using MSDSs. Short of expensive laboratory analysis, there are additional ways to determine if your waste is hazardous.

Question 3: What Are the Eligible Exemptions?

First, you need to see if your waste stream may be among a group of substances that are totally excluded from the regulations. Although we have not listed all the exclusions here, those that may be pertinent to SQGs include:

- Household refuse;
- Unusable paper, cardboard, and plastic scrap;
- Air emissions;
- Certain wastes containing chromium;
- Demolition debris
- Wastes left in the bottom of product storage tanks, as long as that residue is not removed from the tank;

- Wastes discharged to surface waters under a National Pollutant Discharge Elimination System (NPDES) permit;
- Fly ash and related waste from burning fossil fuels;
- Scrap metal, used lead-acid batteries, and waste oil ***that will be sent offsite for reclamation;***
- Waste remaining in the bottom of containers emptied through conventional means (e.g., pumping or pouring). This residue must measure no more than one inch, or constitute no more, in the case of a 55-gallon drum, than 3 percent by weight of the total capacity (1.65 gallons in a 55 gallon drum).
- Wastes managed in an elementary neutralization unit, a totally enclosed treatment unit, or a wastewater treatment unit.
- Arsenic-treated wood or wood products used as intended.
- Waste materials that are reclaimed and returned for use to the original process in which they were generated, provided that certain "closed-loop" recycling criteria are met (essentially, the wastes never leave the production loop).

If you think, but are not sure, that your wastes fit this group, call the state environmental agency.

Question 4: Is The Waste Listed?

A waste is *automatically* considered hazardous if it appears on any one of four lists of hazardous wastes contained in the RCRA regulations. Comprised of more than 400 substances, the lists—found in Subpart D of the regulations—include chemicals that exhibit one of the four hazard characteristics.

A chemical waste does not make one of these lists by accident. EPA follows strict criteria in making the determination of whether a particular substance should be listed. EPA is authorized to list classes of hazardous wastes (e.g., electroplating sludges), as well as named substances (e.g., acetone).

The listed wastes are known by letter identification, as follows:

F wastes. This category refers to generic waste streams found in a variety of industrial processes. Many SQGs generate F wastes; the short list includes cleaners and strippers, dry-cleaning solvents, spent paint wastes, still residues, cleaning and stripping tank solutions, plating bath

solutions and sludges from electroplating operations, and sludges from pretreatment of wastewaters.

Examples
F002—Waste perchloroethylene

F005—Methyl ethyl ketone
F003—Acetone

K wastes. This category refers to specific industrial processes whose wastes are deemed hazardous, such as wastes from the manufacturing of certain chemicals, pigments, inks, explosives, and petroleum refining and steel finishing.

Examples
KOO 1—Bottom sediment sludge from the treatment of wastewaters from wood preserving, processes that use creosote and/or pentachlorophenol
K083—Distillation bottoms from aniline production

P wastes. This category refers to discarded chemical products or off-specification products containing certain acute toxic chemicals. This category includes many pesticides, toxic metals, and organic chemicals shown to be carcinogenic. Except for small chemical firms and pesticide formulators, few SQGs generate P wastes.

Examples
P05-Fluorine
P099—Potassium silver cyanide

U wastes. This category refers to discarded chemical products or off-specification products containing certain toxic chemicals. This list also contains many pesticides, toxic metals, and organic chemicals. As described above, few SQGs generate these wastes.

Examples
U037-chlorobenzene
U06 1—DDT

Special Note about Solvent Wastes

Many *solvents* are mixtures that contain one or more of the "listed" F-waste constituents. It is important to remember that only wastes derived from products containing 10 percent or more of listed solvents are hazardous wastes.

The 10 percent rule does not, however, apply to ignitable wastes (F003) because F003 solvent mixtures may be ignitable at concentrations below 10 percent.

F003 Mixtures should therefore be tested; if the wastes are no longer considered ignitable, they do not need to be classified as a RCRA hazardous waste.

Question 5: Does your Waste Exhibit a Hazardous Characteristic?

The "lists" are not exhaustive. Listing is only one of the ways in which regulated wastes are identified. In addition to all of the substances that are specifically listed in the regulations, any other wastes found to be ignitable, corrosive, reactive, or toxic are also hazardous wastes.

Let's look more closely at how the characteristics are defined (wastes identified as hazardous by characteristic carry the code "D"):

Ignitable. A waste is considered hazardous if it is easily combustible or flammable. Specifically, the wastes must have *a flash point of less than 140 F: A* solid waste is ignitable if it can burn spontaneously and burn persistently. Oxidizers are generally considered ignitable under this definition.

Examples
D00 1 -Spent mineral spirits
D001—Spent lacquers
D00 1—Spent Stoddard solvent

Corrosive. A waste is considered hazardous if it dissolves metals or other materials, or burns the skin. Specifically, the wastes must have a pH of 2 or less (acids) or a pH of 12.5 or more (bases or caustics).

Examples

D002—Spent sulfuric acid
D002—Spent naval jelly
D002—Spent strippers

Reactive. A waste is considered hazardous if it is unstable or undergoes rapid or violent chemical reaction, often explosion, with water or other materials. Reactive wastes also, under certain conditions, can release toxic vapors. Most SQGs will not encounter reactive wastes as often as those with other characteristics.

Examples
D003 - Waste hydrogen cyanide
D003 - Waste hydrogen sulfide

Toxic. A waste is considered toxically hazardous if it is poisonous or can cause cancer, mutations, illness, or death. This could include an enormous universe of chemicals, but it does not. The regulations currently contain a list of just 14 substances that, if present in an extract of the waste stream at threshold concentrations, render the entire waste stream subject to regulation as a hazardous waste.

Testing involves extracting the liquid portion of the waste in such a way that the procedure itself simulates landfill leaching. For this reason, the analytical method is often referred to as the

Toxicity Characteristic Leaching Procedure (TCLP or "T-Clip") extraction test. Currently, EPA has set thresholds for 25 toxic constituents, but the Agency should soon finalize standards for many additional toxic metals, and organic and inorganic chemicals.

Examples
D004 Spent arsenicals
DOO 7/DOO Most paints with toxic metals (chromium, lead)

D008—Lead dross/scrap from batteries
DO 11—Spent silverplating waste

Question 6: Are You Complying With Two Special Rules?

At this point, you may be starting to realize that all of the above determination methods are based on the idea that you have, and can isolate, a single specific waste from one process. What if, as is often the case, several kind of wastes are thrown together, as in a single barrel in the comer, waiting for pickup? This turns what may have started out as waste oil (not a regulated substance in most states) into a hazardous waste which can greatly increase the quantity of hazardous waste you generate.

There are two additional rules that SQGs must understand. The first is called the "mixture rule," and the second, the "derived-from rule." Both are relatively easy to understand.

"Mixture rule." Unless permitted to do so by the EPA or the state hazardous-waste management agency, intentionally mixing a hazardous waste with a nonhazardous waste brings *the entire mixture* under regulation as a hazardous waste. For example, when contaminated solvent is mixed with waste oil in the same drum.

A notable exception to this "treatment rule" is altering pH. Check with your hazardous-waste management agency or local treatment plant concerning pH adjustments.

"Derived-from rule." This rule is even more basic:

Any waste derived from a *listed* hazardous waste is a hazardous waste.

An obvious example of this is the incineration of contaminated solvent, a hazardous waste, which leaves a sludge. The sludge was derived from the original waste so it too is hazardous.

In the case of *characteristic* waste mixtures, if the residue continues to exhibit one or more of the characteristics of the original substance, the waste is **classified as hazardous. Thus, the sludge, ash, dust, or leachate from** hazardous **waste reclamation** (e.g., **distillation stills), incineration,** or treatment may be fully regulated as a hazardous waste.

To determine whether your wastes are regulated, ask yourself:

1. Are they in the exempted list above?

2. Are they named on the EPA's lists?

3. If unnamed, do the MSDSs or other information (labels, brochures, spec sheets, correspondence, shipping papers) concerning the raw materials that created the wastes indicate one of RCRA's four hazardous characteristics?

4. Is the waste listed in the Warren Waste Management Plans waste data sheets?

Other Waste' Issues to Address

First, you should be aware that there is a subcategory of listed wastes referred to as "acutely hazardous. " These wastes are so dangerous, even in small amounts, that if you generate more than 1 kg (approximately 2.2 pounds) of these wastes in a calendar month, you are subject to all of the "large-quantity" generator requirements.

These wastes are primarily pesticides and are neither typically generated nor stored by SQGs.

Second, other wastes, must also be addressed—but not under RCRA. For example, wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than 50 ppm are wastes whose disposal is regulated by the Toxic Substance Control Act (TSCA), and appropriate state regulations.

Brake pads and linings containing asbestos must also be disposed of properly. EPA regulations require that asbestos be disposed of in a doublewalled plastic bag marked "Asbestos." While some local landfills will accept these bags, it is increasingly common to have to pay for these wastes to be taken to a special commercial landfill.

Third, check the Warren Waste Management Plans data sheets to review additional wastes.

Summary Checklist

Learning to Identify Wastes as Hazardous

1. Assume that all wastes excluding household garbage and paper wastes are potential hazardous wastes.

2. Make a list of all discarded substances, including wastes that are burned, placed in the trash, or poured down the drain.

3. Ask for assistance. For general compliance and notification assistance, contact the Environmental Department

4. Determine which of your wastes are "listed" wastes by comparing your wastes to the lists found in Part 261.31-.33 of 40 CFR (RCRA).

5. Use MSDS information on the product label, lists in this document, and consultation with the Environmental Department, chemical vendors, or waste haulers to determine which wastes are probable "characteristic" wastes.

Other Hints

Once you have determined which wastes are "listed" and which wastes are probable "characteristic" wastes, your waste hauler or an independent EPA-licensed laboratory canperform a waste characterization on your wastes to answer any uncertainties.

Try to avoid unnecessary and expensive private laboratory analysis. Industry-specificwaste streams are generally similar and can easily be identified by a RCRA compliance expert.

Be sure to test any chemicals that could be contaminated with heavy metals.

Remember, ignorance of a waste's hazard characteristics is not a legal defense. Be sure to identify all hazardous waste streams.

Finally, no matter what the legal status of a waste, and even if it is "exempted" (e.g., lead-acid batteries destined for reclamation), remember that these remain substances dangerous to human health and the environment. Treat them as such.

Specific Help

In Section 5 of this manual, you will find charts of hazardous (and non-hazardous) wastes commonly generated by NGC natural gas and NGL facilities. The following paragraphs discuss wastes typically generated in the natural gas industry.

WASTES GENERATED IN EXPLORATION AND PRODUCTION OPERATIONS

GAS PLANTS

This section discusses the four primary operations associated with E&P activities: gas plants, production facilities, drilling and workovers It discusses operational and design aspects as well as wastes generated Companies may vary in their engineering design and operational practices, but they generally all utilize the technology and generate the wastes discussed in this section.

Natural gas plants provide centralized dehydration, compression and sweetening facilities necessary to place natural gas in marketable condition and to extract natural gas liquids such as ethane, propane and butane.

Natural gas streams entering gas processing plants vary in composition but methane usually is the predominant component, with smaller amounts of ethane, propane, butanes, pentanes, and heavier hydrocarbons. The raw gas may also contain compounds such as carbon dioxide, hydrogen sulfide, mercaptans, other sulfur compounds, water, and certain solid impurities. These compounds are removed in treating facilities. The treated raw gas then enters an extraction facility which produces residue gas and heavier natural gas liquids (NGLs) such as ethane, propane and butane.

Listed below are the five extraction and treating processes frequently performed in gas plants and the waste materials that may be generated from these processes.

INLET SEPARATION AND COMPRESSION

Gas is gathered from the field at the inlet of the gas plant. Here fluids such as produced water and liquid hydrocarbons are separated, and the gas, if necessary, is compressed to a sufficient pressure to allow the plant to operate. Wastes typically associated with inlet separation include produced water as well as pigging materials, inlet filter media, fluids from corrosion treatments, and small amounts of solid material (pipe scale, rust, and minor amounts of reservoir formation materials). Wastes generated from the operation of plant inlet compressors are the same as wastes generated from compressors used in field operations. These wastes include engine cooling water and used lubrication oil and filters.

Inlet separators should be designed to send the produced water and hydrocarbons into process vessels where hydrocarbons can be recovered for sale and produced water separated for disposal. Small amounts of pigging materials may be recovered at pig receiving traps andshould be disposed of properly.

For safety reasons, inlet separators are equipped with relief valves that vent to emergency containment. This occurs if a fluid slug reaches the plant that exceeds separation capacity or if gas pressure exceeds design capacity of plant facilities. Emergency pits are not disposal facilities and fluids vented should be recovered as soon as practical (generally within 48-72 hours) and disposed of properly.

The pits should be constructed in accordance with regulations. In the event natural gas is flared, these flare incidents may require reporting to air quality and oil and gas regulatory agencies depending on the composition and volume of the flare gas.

DEHYDRATION

All natural gas contains a certain amount of water vapor. Typically this water content must be reduced to meet sales pipeline specifications. Dehydration is the process of extracting water vapor to make the gas marketable. The processes used are identical to those used in field facilities where centralized dehydration at a gas plant does not occur.

Natural gas is dehydrated by contact with liquid or solid desiccants. Liquid desiccants such as ethylene, diethylene, or triethylene glycol absorb the water. Heat regeneration evaporates the water, and the glycol is recovered for reuse. With solid desiccant dehydration, natural gas flows through tower vessels filled with alumina, silica-gel, silica-alumina beads, or molecular sieve which absorb water vapor

Wastes generated during the dehydration process consists of glycol based fluids, glycol filters, condensed water, and solid desiccants. These fluids and solids may contain trace levels of hydrocarbons and treating chemicals.

SWEETENING & SULFUR RECOVERY

Some natural gas contains hydrogen sulfide, carbon dioxide, or other impurities that must be removed to meet specifications for sales pipeline and field fuel use. The process of sweetening may be conducted using units identical in operation to units used in field facilities where centralized sweetening facilities are unavailable or in dedicated sulfur recovery facilities where high hydrogen sulfide concentrations are present.

Sweetening primarily consists of lowering the hydrogen sulfide and carbon dioxide content in natural gas. Hydrogen sulfide is removed from natural gas by contact with amine, sulfinol, iron sponge, caustic solutions, and other sulfur converting chemicals. Heat regenerates amine or sulfinol for reuse. Iron sponge, caustic solutions, and other sulfur converting chemicals are spent in the process as hydrogen sulfide is converted to iron sulfide and other sulfur compounds.

Amine treating of natural gas for the removal of hydrogen sulfide and carbon dioxide is the process that is probably most widely used in industry.

This process is based on the reaction that aliphatic alkanolamines will react with acid gases at moderate temperatures, and that the acid gases are released at slightly higher temperatures.

The reactions for this process using aqueous monoethanolamine (MEA) and hydrogen sulfide are as follows:

$$2\,(HO\,CH_2 - CH_2 - NH_2) + H_2S \leftrightarrows (HO\,CH_2 - CH_2 - NH_3)\,2\,S + Heat$$

$$(HO - CH_2 - CH_2 - NH_3)\,2\,S + H_2S \leftrightarrows 2\,(HO - CH_2 - CH_2 - NH_2)\,HS + Heat$$

Wastes generated in amine sweetening include spent amine, used filter media, and acid gas which must be flared, incinerated or sent to a sulfur recovery facility.

In the iron sponge treating process, iron oxide reacts with hydrogen sulfide to form iron sulfide. Iron sponge is composed of finely divided iron oxide, coated on a carrier such as wood shavings.

The chemical reaction for the removal of hydrogen sulfide with the iron sponge treating process is as follows:

$3H_2S + Fe_2O_3 \nearrow Fe_2S_3 + 3H_2O$

The iron sponge process is generally used for treating gas at pressures less than 50 psig with total hydrogen sulfide content under 100 grains per 100 standard cubic feet. There is no limit to treating pressure; however, due to inherent gas velocity limitations through the treating bed, most high pressure applications are limited due to the economics of bed size and bed life. Wastes generated in the iron sponge process are iron sulfide and wood shavings.

Small volumes of hydrogen sulfide may also be removed from natural gas and NGLs by contact with a caustic solution which is reused until spent. Most caustic treaters utilize a 15 to 20 percent by weight sodium hydroxide solution wherein the caustic consumption is approximately 2.4 pounds per pound of hydrogen sulfide removed and 1.9 pounds per pound of carbon dioxide removed. Most caustic treaters consist of a simple vessel holding the caustic solution through which gas is allowed to bubble.

The chemical reaction for removal of hydrogen sulfide with caustic is as follows:

$H_2S + NaOH \nearrow Na_2S + 2H_2O$

The primary waste from caustic treating is spent caustic solution. Use of other sulfur converting compounds such as sulfa-check are employed in one-step processes for the removal of low levels of hydrogen sulfide. Here, a direct conversion occurs at ambient temperature that uses a single contact vessel. Natural gas bubbles through the vessel until the sulfur converting compound is spent. The spent material is a nonhazardous slurry of sulfur and salts.

Dedicated sulfur recovery facilities for high hydrogen sulfur content gas or high throughput facilities may use catalytic processes. Here, hydrogen sulfide is removed from sour natural gas using amine or sulfinol solutions.

As part of the regeneration process, hydrogen sulfide is driven out of solution. The hydrogen sulfide is then burned in the presence of oxygen to produce sulfur dioxide. A mixture of hydrogen sulfide and sulfur dioxide, when passed over a heated catalyst, forms elemental sulfur.

This process is known as the Claus process. It uses inert aluminum oxide, in pellet form, as a catalyst. The catalyst does not react in the sulfur making process. The aluminum oxide catalyst simply provides a greater surface area to speed and assist the process.

Molecular sieve absorbents are used to remove hydrogen sulfide, mercaptans, and heavier sulfur compounds from gases and NGLs. Simultaneous sweetening and dehydration may be accomplished in the same unit. Molecular sieve sweetening is a regenerable batch type operation which requires at least two beds for continuous processing. One bed is sweetening gas while the other is being regenerated.

Waste materials generated may include water vapor, which is vented, condensed or contained within the molecular sieve; regeneration gas which is used as a fuel source or recombined and sent to sales; and spent molecular sieve.

NGL RECOVERY

Gas plants provide centralized gas gathering services (such as compression, dehydration, and sweetening) and also recover NGLs which are hydrocarbons heavier than methane which exist as liquids at moderate pressures. NGL recovery is the process by which hydrocarbons such as butane or propane are extracted. NGL extraction may use either compression and/or cooling processes, absorption processes, or cryogenic processes. These processes either absorb heavier molecular compounds from the process stream with an absorption oil that is recycled or use temperature and pressure to separate fractions with different boiling points.

Wastes generated include lubrication oils, spent or degraded absorption oil, waste waters, cooling tower water, and boiler blowdown water.

Plant compression and utility systems (fuel, electrical generators, steam equipment, pump, and sump systems) are necessary to operate gas plants and to raise the pressure of plant residue gas to match sales gas pipeline pressure. Compressors are driven by electric motors, internal combustion or turbine engines. These engines, compressors and utility systems generate used lubrication oils, cooling waters, drips of lubrication and hydraulic oils, wastewaters, varsol used for cleaning equipment, and oily debris such as rags, sorbents and filters.

Liquid wastes should be disposed of via the plant sump system where wash waters, lubrication oils, cooling waters, etc., are typically collected via a series of sumps. Fluids are usually collected from the sumps into a central clarifier/classifier pit where waters are
separated for disposal via Class II injection wells, NPDES discharge, or evaporation pits.

Hydrocarbons are recycled by returning them to sales streams or, if sales streams are not available, to waste oil collection and reclamation facilities.

Other solid wastes include filters which should be disposed of in accordance with applicable regulations

SEPARATORS

Two phase separators isolate produced liquids from gases as they flow from the wells. Three phase separators, with additional float mechanisms, also separate produced water from liquid hydrocarbons and deliver gas, oil or condensate, and water to respective facilities for further processing or sale. The primary waste generated is bottoms, including sand and scale recovered during cleanout operations. A free-water knockout (F WKO) is a vessel which separates free water (water that is not linked to oil in an emulsion) from other produced fluids. Separated produced water then flows into a

disposal or injection system. FWKOs are occasionally drained to remove solids and bottom sludges.

HEATER TREATERS

Heater treaters and/or electrostatic treaters separate emulsified oil and water. Occasionally, emulsions which cannot be successfully treated in a single pass ("bad oil") must be placed in a standby oil tank for recycling and further treatment. Produced water which is separated in the treaters goes to a disposal or injection system. As with the FWKO, these vessels are occasionally drained to remove solids and bottom sludges. Vessels which use hay or excelsior sections to absorb minute amounts of oil must be periodically cleaned out and the absorption material replaced.

FILTERS

To improve fluid and water quality, filters are frequently used. Filter media must be replaced or, if permanent, backwashed. Replaceable filters include sock, cartridge, or canister units. Permanent filters may use diatomaceous earth or granular media such as sand or coal.

Permanent filters are periodically backwashed with fresh or produced water sometimes containing a small amount of surfactant. Backwash is circulated to a solids treatment and disposal system where the backwash liquid is then usually returned to the production facilities for reprocessing.

GAS FLOTATION VESSELS

Another type of treatment system utilizes gas flotation. These units are sometimes used to remove small concentrations of insoluble oil and grease from produced water. The units agitate the water by injecting a gas, usually natural gas or air, through the liquid stream. This action flocculates the suspended oil, grease, and dirt. The flocculated materials rise to the surface where they are skimmed off. Depending on the quality of this material, it may be discarded as waste or recovered as oil.

COMPRESSORS

Compressors are used to boost lower pressure gas to sales line pressure, for vapor recovery, or to allow flow into central facilities. Compressors may be electric motor driven or driven by internal combustion or turbine engines.

Wastes generated include engine cooling water and used lubrication oils and filters.

DEHYDRATION AND SWEETENING UNITS

Field dehydration and sweetening units perform the same function as described for gas plants. Wastes include iron sponge, spent glycol, spent amine, spent caustic and filter media.

Scrubbers are used where necessary to separate fluids from gas. After scrubbing, recovered fluids may include condensate, oil and/or produced waters which should be recycled by returning to process facilities.

METHANOL INJECTION AND LINE HEATERS

As gas is produced from a reservoir, its pressure and temperature drop. If sufficient water or water vapor exists in the gas stream hydrates (ice) may form and block flow lines. To prevent hydrate formation, methanol is sometimes injected in low concentrations (ppm) or line heaters are used.

The only waste generated from methanol injection is empty methanol containers. Wastes generated from line heaters include spent thermal fluids (such as glycol, oil or salt mixtures) used to transfer heat from heat sources to the gas stream.

EPA's List of Exempt Exploration and Production Wastes

The following wastes are listed as exempt in EPA's Regulatory Determination submitted to Congress in June 1988:

- Produced water
- Drilling Fluids
- Drill Cuttings
- Rigwash
- Drilling fluids and cuttings from offshore operations disposed of onshore
- Well completion, treatment, and stimulation fluids
- Basic sediment and water and other tank bottoms from storage facilities that hold product and exempt waste
- Accumulated materials such as hydrocarbons, solids, sand, and emulsion from production separators, fluid treating vessels, and production impoundments
- Pit sludges and contaminated bottoms from storage or disposal of exempt wastes
- Gas plant dehydration wastes, including glycol-based compounds, glycol filters, filter media, backwash, and molecular sieves
- Gas plant sweetening wastes for sulfur removal, including amine, amine filters, amine filter media, backwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge.
- Cooling tower blowdown.
- Spent filters, filter media, and backwash (assuming the filter itself is not hazardous and the residue in it is from an exempt waste stream
- Packing fluids
- Pipe scale, hydrocarbon solids, hydrates, and other deposits removed from piping and equipment prior to transportation
- Hydrocarbon-bearing soil
- Pigging wastes from gathering lines

- Wastes from subsurface gas storage and retrieval, except for the listed nonexempt wastes
- Constituents removed from produced water before it is injected or otherwise disposed of
- Liquid hydrocarbons removed from the production stream but not from oil refining
- Gases removed from the production stream, such as hydrogen sulfide and carbon dioxide, and volatilized hydrocarbons
- Materials ejected from a producing well during the process known as blowdown
- Waste crude oil from primary field operations and production
- Light organics volatilized from exempt wastes in reserve pits or impoundments or production equipment.

EPA's List of Nonexempt Exploration and Production Wastes

EPA's Regulatory Determination for exploration and production wastes lists the following wastes as nonexempt. It appears that the EPA concluded waste materials from maintenance of production equipment as well as transportation (pipeline and trucking) related wastes were nonexempt. While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown

- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractor bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation, and miscellaneous solids.

EPA did not specifically address in the Regulatory Determination the status of hydrocarbon-bearing material that is recycled or reclaimed by reinjection into a crude stream (used oils, hydraulic fluids, and solvents).

However, under existing EPA regulations, recycled oil, even if it were otherwise hazardous, could be reintroduced into the crude stream, if it is from normal operations and is to be refined along with normal process streams at a petroleum refinery facility [see 40 CFR§261.6 (a)(3)(vi)].

ADDITIONAL EXEMPT WASTES

It should be noted that EPA's lists of exempt and nonexempt wastes are not all-inclusive and that determinations will need to be made on a number of other incidental wastes. In deciding which wastes were exempt, it appears that EPA focused on wastes necessary to conduct so-called "primary field operations" (including centralized facilities and gas plants).

Using this approach, the following wastes, although not specifically listed as exempt, appear clearly exempt.

- Excess cement slumes and cement cuttings
- Sulfur contaminated soil or sulfur waste from sulfur recovery units
- Gas plant sweetening unit catalyst

- Produced water contaminated soil
- Wastes from the reclamation of tank bottoms and emulsions when generated at a production location
- Production facility sweetening and dehydration wastes
- Pigging wastes from producer operated gathering lines
- Production line hydrotest presenring fluids utilizing produced water
- Iron sulfide

This section does not address wastes exempt from Subtitle C under other provisions of RCRA (e.g., 40 CFR 261.4).

Requirements for Nonexempt Wastes

Operators should consider testing nonexempt wastes whenever there is reason to believe they may exhibit one of the hazardous waste characteristics.

Although there is no requirement that a nonexempt waste be tested to determine if it is hazardous, civil and criminal penalties may be imposed if the waste is not managed in a safe manner, and according to regulations.

It is also important to emphasize the prudence of segregating non-exempt waste from exempt waste. One possible implication is that knowingly commingling of a nonexempt waste with an exempt waste could result in the entire waste stream losing its exempt status and perhaps having to be handled as a hazardous waste.

If the nonexempt waste were a listed hazardous waste, EPA's mixture rule makes the entire commingled waste stream subject to stringent RCRA Subtitle C requirements, including the requirement that it be disposed at a hazardous waste facility. Therefore, it is usually in the best interest of an operator to routinely segregate nonexempt waste from exempt waste. When segregation is not practical, the nonexempt waste should be examined closely to ensure that it is not a hazardous waste.

Finally, there are a few states with hazardous waste regulations which differ from those the EPA has promulgated. These state rules are at least as stringent as the federal regulations (by law they must be at least equivalent to those set forth by the EPA).

LIST OF TYPICAL GAS PROCESSING WASTE STREAMS

ACID (SPENT)

WASTE CATEGORY:

Spent acid from gas processing plants may be a characterisitcally hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.20 - 261-24). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

Test for hazardous characteristics (corrosivity) and TCLP metals.

DISPOSAL AT AN OCD-APPROVED FACILITY If **NOT HAZARDOUS**: OCD does not require testing of this waste; however each OCD-approved facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store acid in a properly labeled rigid-wall container prior to disposal. Handle in a manner that minimizes employee exposure.

FOR SHIPPING: if **nonhazardous** no shipping requirements. If **hazardous**, will need to review the shipping requirements and possibly test. Call ES&H in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD-APPROVED FACILITY: There are no reporting requirements for the OCD. Retain a copy of the Bill of Lading or other billing information that documents the generator, type and quantity of waste, transporter, and disposal site. MAINTAIN copies of records in active files for 3 years and archived for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

If test indicates non-hazardous waste, it should be disposed of in a permitted injection/disposal well. If test indicates hazardous waste, it should be disposed of at a RCRA permitted TSD facility. Contact safety department.

ACTIVATED ALUMINA

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT AN OCD-APPROVED FACILITY: OCD does not require testing of this waste; however each OCD-approved facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain and collect fluids. Allow alumina to dry for 48 hours. Collect and incorporate fluids into wastewater disposal system. Store alumina in a properly labeled container prior to disposal.

FOR OFFSITE SHIPPING, not a hazardous waste, therefore no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD-APPROVED FACILITY: There are no reporting requirements for the OCD. Retain a copy of the Bill of Lading or other billing information that documents the generator, type and quantity of waste, transporter, and disposal site. MAINTAIN copies of records in active files for 3 years and archived for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-approved disposal facility. See Section 12 for a complete and current list of facilities.

AMINE - includes spent monoethanolamine, diethanolamine.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) **when used in gas sweetening processes.** The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL VIA CLASS II DISPOSAL WELL: no testing is required.

FOR DISCHARGE PER NPDES PERMIT: comply with testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in storage vessel such as sump or storage tank prior to disposal in onsite or commercial disposal well.

FOR SHIPPING OFFSITE: For **Monoethanolamine only** the shipping description is **Ethanolamine Solutions, 8, UN2491, III.** Shipping papers are **required,** the placard is **Corrosive.** For **Diethanolamine only** the shipping description is **RQ, Environmentally Hazardous Substance, liquid, N.O.S. (contains Diethanolamine), 9, UN3082, III.** Shipping papers are **required,** the placard is **Class 9.**

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II permit or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted by the OCD to **dispose of gas plant wastewaters;** OR, if specified in the permit, NPDES discharge.

AMINE RECLAIMER BOTTOMS

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR RECLAIMING, DISPOSAL PER CLASS II DISPOSAL WELL, OR OCD-PERMITTED DISPOSAL FACILITIES: the OCD does not require testing. However, each OCD-permitted disposal pit may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Removal of bottoms from vessels should be done in such a manner as to minimize spillage. Use drip pans or catchment vessels.

Mix solids with wastewaters for disposal via Class II disposal well.

For storage onsite prior to disposal, place in drums, tanks, or other closed/covered containers, or remove from site immediately upon removal of bottoms from vessels.

FOR SHIPPING OFFSITE: For **Monoethanolamine only** the shipping description is **Ethanolamine Solutions, 8, UN2491, III.** Shipping papers are **required**, the placard is **Corrosive**. For **Diethanolamine only** the shipping description is **RQ, Environmentally Hazardous Substance, liquid, N.O.S. (contains Diethanolamine), 9, UN3082, III.** Shipping papers are **required**, the placard is **Class 9.**

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY (including commercial disposal wells or waste pits): There are no reporting requirements. Keep Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, the generator, transporter, and disposal site.

FOR ONSITE DISPOSAL WELLS: maintain records per Class II disposal well permit.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (on-site or off-site) permitted by the OCD to accept gas plant wastewaters.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

ANTIFREEZE (USED)

WASTE CATEGORY:

Used antifreeze consists of a mixture of ethylene glycol and water that is used as a heat transfer medium in internal combustion gas compressor engines. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Used antifreeze should be recycled or reclaimed if possible.

TESTING:

FOR RECLAIMING, DISPOSAL PER CLASS II DISPOSAL WELL, OR OCD-PERMITTED DISPOSAL FACILITIES: the OCD does not require testing. However, each OCD-permitted disposal pit may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Remove antifreeze from radiator/engine in a manner which prevents spillage. Drip pans or catchment vessels are recommended. If antifreeze is stored, leak-proof, rigid-walled containers are preferred.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY: There are no reporting requirements. Keep Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, the generator, transporter, and disposal site.

FOR ONSITE DISPOSAL WELLS: maintain records per Class II disposal well permit.

FOR RECLAIM OR RECYCLE: No recordkeeping requirements.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

If reclaim or recycle not possible, state may allow disposal in a permitted injection well. Contact environmental staff.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

BARRELS/DRUMS/CONTAINERS (NOT EMPTY)

WASTE CATEGORY:

Containers which held chemicals, paints, thinners, solvents, or other products but now are only partially full of the material. The exact contents of the material in the barrel/drum may be unknown. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

If the contents are known, return the barrel/drum/container to the vendor or use the contents. If the contents are unknown, see MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS section below.

TESTING:

Contact environmental staff.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

If the contents of the barrel/drum/container are known, handle the material as indicated by the IVISDS. If the contents are unknown, contact your environmental staff. Store the barrel/drum/container so that leakage is prevented. Place bungs or covers securely on containers during storage.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY: There are no reporting requirements. Keep Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, the generator, transporter, and disposal site.

FOR RECLAIM OR RECYCLE: No recordkeeping requirements.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

If reclaim or recycle not possible, Contact environmental staff.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

BOILER WATER BLOWDOWN

WASTE CATEGORY:

Non-exempt solid waste (53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL WELL: this waste must be tested for ignitability, corrosivity, reactivity, and Toxicity Characteristic Leaching Procedure (TCLP) metals and organic compounds to characterize the waste. If the generator can prove by knowledge of process, that this waste is not hazardous, then no testing is required. The generator must provide information concerning the process and the chemicals used in that process.

FOR NPDES DISCHARGE: comply with testing specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in storage vessel such as sump or storage tank prior to disposal.

FOR SHIPPING: if **nonhazardous** no shipping requirements. If **hazardous**, will need to review the shipping requirements and possibly test. Call EH&S in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL, maintain records per Class II or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

IF NONHAZARDOUS: Class II disposal well (onsite or offsite) permitted by the OCD **to dispose of gas plant wastewaters**; **OR**, if specified in the permit, discharge per NPDES permit.

IF THE WASTE IS HAZARDOUS: it can be disposed in a Class I Hazardous disposal well or if specified in the permit, NPDES discharge.

BRINE CONTAMINATED SOILS

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT AN OCD-APPROVED FACILITY: OCD does not require testing of this waste; however each OCD-approved facility may have specific testing requirements.

FOR ON-SITE TREATMENT/DISPOSAL: Contact environmental department.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

If necessary, brine contaminated soils should be stored in an area lined with impermeable material and bermed to prevent runoff or leaching.

When remediation is deemed necessary (usually per landowner's request) contaminated soils should be sampled and analyzed for chloride content and sodium absorption ratio. Soil restoration should begin promptly. In-place treatment is recommended. Depending on site hydrologic characteristics, land treatment may be acceptable. Gypsum or other soil treatments may be applied. (Such as LCA 11.) Soil rinsing may be appropriate with approved disposal of residue (see Brine Water).

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE TREATMENT/DISPOSAL: Contact environmental department.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal sites.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Removal of the contaminated soil and disposal in a permitted off-site pit or landfill is acceptable. Contact safetydepartment.

BRINE WATER

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL VIA CLASS II DISPOSAL WELL: no testing is required.

FOR DISCHARGE PER NPDES PERMIT: comply with the testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Separate oil, condensate, water. Store water in holding vessels such as sumps, storage tanks or evaporation pits prior to disposal. Tanks and pits that might contain oil should be flagged, netted or covered in some manner to protect wildlife. Avoid contact with soil as much as possible. Collect hydrocarbons in storage vessel for sale.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal sites.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted by the OCD **to dispose of gas plant wastewaters;** OR, if specified in the permit, NPDES discharge.

Off-site evaporation at a permitted facility.

CAUSTIC - spent.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL VIA CLASS II DISPOSAL WELL: no testing is required.

FOR DISCHARGE PER NPDES PERMIT: comply with testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in storage vessel such as sump, storage tank, or evaporation pit prior to disposal. Tanks and pits that might contain oil should be flagged, netted or otherwise covered to protect wildlife.

FOR SHIPPING: The shipping description is **Sodium Hydroxide, Solution, 8, UN1824, II.** Shipping papers are **required**, the placard is **Corrosive**. If the shipment contains 1,000 lbs or more, the letters "**RQ**" must precede the shipping description.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II permit or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted by the OCD **to dispose of gas plant wastewaters; OR**, if specified in the permit, NPDES discharge.

CHARCOAL

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: OCD does not require testing of this waste; however each OCD-approved facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain and collect fluids. Allow charcoal to dry for 48 hours. Collect and incorporate fluids into wastewater disposal system. Store charcoal in a properly labeled and sealed container prior to disposal. Dust can be explosive.

FOR SHIPPING OFFSITE: The shipping description is **Charcoal, 4.2, NA1361, III**. Shipping papers are **required**. The placard is **Spontaneously Combustible**.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT OCD FACILITY: There are no reporting requirements for the OCD. Retain a copy of the Bill of Lading or other billing information that documents the generator, type and quantity of waste, transporter, and disposal site.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

COOLING TOWER BLOWDOWN

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Use corrosion inhibitors that do not contain chromium.

Operate cooling towers efficiently to minimize the generation of blowdown.

TESTING:

FOR DISPOSAL WELL VIA CLASS II DISPOSAL WELL: no testing is required.

FOR DISCHARGE PER NPDES: comply with testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in wastewater storage vessel such as sump, storage tank or evaporation pit prior to disposal. Tanks and pits that might contain oil should be flagged, netted or otherwise covered to protect wildlife.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted **to dispose of gas plant wastewaters; OR**, if specified in the permit, NPDES discharge.

COOLING TOWER SLUDGE

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Use corrosion inhibitors that do not contain chromium.

TESTING:

DISPOSAL AT A OCD-APPROVED FACILITY: The waste must be characterized. Test for Toxicity Characteristic Leaching Procedure (TCLP) metals and organics, ignitability, and reactivity. Use the Paint Filter Liquids test to determine if sludge contains free liquid. If free liquids are present test for corrosivity. If the generator can prove by knowledge of process that a waste is not hazardous, then no testing is required. The generator must provide information regarding the process from which the waste is generated and the chemicals used in that process.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

(1) Remove all free liquids and incorporate into wastewater disposal system. (2) Store in drums, tanks, or other closeable containers.

FOR SHIPPING OFFSITE: if **nonhazardous** there are no shipping requirements. If **hazardous**, will need to review the shipping requirements and possibly test. Call EH&S in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT OCD FACILITY: There are no reporting requirements for the OCD. Retain a copy of the Bill of Lading or other billing information that documents the generator, type and quantity of waste, transporter, and disposal site.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

DEBRIS, UNCONTAMINATED - includes wood, glass, concrete.

WASTE CATEGORY:

Inert nonhazardous solid waste. Inert wastes can be disposed at facilities approved by the New Mexico Oil Conservation Division or at a municipal landfill. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store in labeled bins. Do not mix with material that is contaminated or may be hazardous.

FOR SHIPPING OFFSITE, no shipping requirements if uncontaminated.

RECORDKEEPING/REPORTING REQUIREMENTS:

Permits are not necessary for the disposal of inert and uncontaminated solid waste. Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of debris disposed.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

On-site burial if permitted in the facility discharge plan. Consult lease requirements and landowner for any additional requirements.

DEHYDRATOR - CONDENSED WATER

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Should be stored in leak-proof, rigid-walled containers.

FOR SHIPPING OFFSITE, no shipping requirements if uncontaminated.

RECORDKEEPING/REPORTING REQUIREMENTS:

Permits are not necessary for the disposal of inert and uncontaminated solid waste. Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of debris disposed. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted **to dispose of gas plant wastewaters;** OR, if specified in the permit, NPDES discharge

DRUMS - Empty plastic or metal.

WASTE CATEGORY:

Non-exempt solid waste. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste. Check the Material Safety Data Sheet (MSDS) and Hazardous Waste Booklet (Section 14) to confirm whether drum contained a pure product that is listed as acutely hazardous. If the product is acutely hazardous consult with HE&LP in Houston for specific cleaning instructions.

WASTE MINIMIZATION:

Return drums to vendor.

Use tanks to store chemicals in bulk and reduce or eliminate the use of drummed chemicals.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Do not allow empty drums to accumulate onsite. All drums must be empty; i.e., All materials or wastes have been removed using practices employed to handle drums such as pouring, pumping, or aspirating. No more than 2.5 centimeters (one inch) of residue remains on the bottom of the drum or inner liner. No more than 3% by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size; no more than 0.3% by weight of the total capacity of the container or inner liner if the container is greater than 110 gallons in size. Mark the drums as "Empty" and use one of the following options prior to disposal. 1) Replace the lid or bungs tightly on empty drums to prevent the accumulation of rainwater or other materials. Rainwater or other materials that accumulate in empty drums may have to be handled and disposed as hazardous waste. 2) Cut the ends out of the drum so it cannot be used as a container.

FOR SHIPPING: Remove or paint over all DOT markings and labels on drums prior to shipping.

RECORDKEEPING/REPORTING REQUIREMENTS:

Track the empty drums using the Warren Petroleum Company Waste Drum/Container Log (Section 11). Keep Bill of Lading, run ticket, or other information that documents the generator, transporter, disposal site and volume when drums are disposed. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Recycle drums: Make arrangements with vendor to return on a deposit basis.

Replace drums with bulk storage units.

FILTERS, AIR

WASTE CATEGORY:

Inert nonhazardous solid waste. This waste can be disposed at a facility permitted by the New Mexico Oil Conservation Division or at a municipal landfill.

WASTE MINIMIZATION:

None at this time.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store separately from oil, sock, glycol or other filters to avoid contamination, testing and permitting requirements.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

Permits are not necessary if disposed with other inert solid waste. Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of filters disposed. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

FILTERS, GLYCOL

WASTE CATEGORY:

Inert nonhazardous solid waste. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste

WASTE MINIMIZATION:

None at this time.

TESTING:

TCLP (not required if recycled).

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Waste filters should be handled in a way to prevent spillage. Drip pans or catchment vessels should be used. All liquids should be drained from filters before disposal. Liquids should be returned to production facilities for reprocessing. Filters should be segregated from other filter types, placed in plastic garbage bags and into metal containers.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

Keep following records: Disposal date, number of filters disposed of, haulers name, location and name of disposal facility. Results of analyses (TCLP) required for disposal into landfill. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Recycle filters.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

FILTERS, SOCK includes sock filters used as glycol, and amine filters.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-APPROVED FACILITY: OCD does not require testing of this waste; however, each OCD-approved facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain and collect liquids. Allow filters to dry for 48 hours. Store in bin for process filters. Incorporate liquids into wastewater disposal system.

FOR SHIPPING OFFSITE, not a hazardous waste, therefore no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY: There are no reporting requirements for the OCD. Keep copies of Bill of Lading, run ticket or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

FILTERS, USED OIL - non-terne plated; terne is an alloy of tin and lead which is used to plate oil filters. These filters are from an internal combustion engine used to filter crankcase oil.

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) (261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain more than 24 hours to remove all used oil by one of the following hot-draining methods: 1) Puncturing the filter anti-drain back valve or the filter dome end and hot-drain; **OR** 2) Hot-drain and crush; **OR** 3) Dismantle and hot-drain; **OR** 4) Flush the filter; **OR** 5) Any other equivalent method which will remove the free flowing oil.

After draining, allow filters to dry. Collect oil and reclaim or sell for refining. Store filters in covered enclosure or covered rainproof containers on an impermeable surface. Containers must be labeled "Used Oil Filters". **Do not keep storage units containing filters onsite more than 30 days.** Transport containers must be labeled with the date, the final destination, and the name and address of both the generator and the transporter.

FOR SHIPPING OFFSITE, if **nonhazardous** no shipping requirements. If **hazardous** contact EH&S in Houston for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD FACILITY: There are no reporting requirements for the OCD. Retain copies of the Bill of Lading, run ticket, or other billing information that documents the volume and type of waste, generator, transporter, and disposal facility.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

OCD-permitted processor, disposer, or end user (someone who uses the oil filters or its components as feedstock for their processes).

GLYCOL - spent ethylene glycol, triethylene glycol, and diethylene glycol.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) **when used in dehydration processes** (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL VIA CLASS II DISPOSAL WELL: no testing is required.

FOR DISCHARGE PER NPDES PERMIT: comply with testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in storage vessel such as sump or tank, prior to disposal. Tanks that might contain oil should be flagged, netted or otherwise covered to protect wildlife.

FOR SHIPPING OFFSITE, For **Ethylene Glycol only** the shipping description is **RQ, Environmentally Hazardous Substance, liquid, N.O.S. (contains ethylene glycol), 9, UN3082,** III. Shipping papers are **required,** the placard is **Class 9.**

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II permit or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted **to dispose of gas plant wastewaters; OR**, if specified in the permit, NPDES discharge.

HYDROSTATIC TEST WATER

WASTE CATEGORY:

Hydrostatic test water is **exempt** from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b)) **when derived from the testing of gathering pipelines or pipelines used to transport raw or unrefined products.** Hydrostatic test water is **non-exempt** solid waste under RCRA **when derived from the testing of transmission pipelines or pipelines used to transport refined products.** The New Mexico Oil Conservation Division has jurisdiction over the management of this waste. See Section 12 (Guidelines for Hydrostatic Test Dewatering) for specific information regarding the requirements for disposal of this waste in New Mexico.

WASTE MINIMIZATION:

Conduct tests only when necessary.

TESTING:

FOR CLASS II DISPOSAL WELL: if exempt no testing is required. If non-exempt, test for Toxicity Characteristic Leaching Procedure (TCLP) metals and organics, ignitability, corrosivity and reactivity. If the generator can prove by knowledge of process that this waste is not hazardous, then no testing required. The generator must provide information on the chemical composition of the waste and the process from which it was derived.

FOR DISCHARGE PER NPDES PERMIT: meet testing requirements of the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store water in holding vessels such as sumps, storage tanks or evaporation pits prior to disposal. Tanks and pits that might contain oil should be flagged, netted, or otherwise covered to protect wildlife.

FOR SHIPPING OFFSITE, if **nonhazardous**, no shipping requirements. If **hazardous**, need to review shipping requirements and possibly test. Contact EH&S in Houston for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ON-SITE DISPOSAL: maintain records per Class II permit or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: maintain records of type and volume of waste, generator, transporter, and disposal facility by retaining run tickets or other billing information. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

IF EXEMPT OR NONHAZARDOUS: Class II disposal well (onsite or offsite) permitted **for disposal of gas plant wastewaters**; OR, If specified in the permit, NPDES discharge.

IF THE WASTE IS HAZARDOUS: it can be disposed in a Class I Hazardous disposal well; **OR**, if specified in the permit, NPDES discharge.

INHIBITORS (USED) / BIOCIDES

WASTE CATEGORY:

(Chemical inhibitors can be used for selected chemical treating programs to prevent scale. In most cases these chemicals will remain in the gas stream and do not become a waste management issue. This description addresses the case where inhibitors are recovered). Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL VIA CLASS II DISPOSAL WELL: TCLP, RIC if recovered inhibitors cannot be reused.

FOR DISCHARGE PER NPDES PERMIT: comply with testing requirements specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

All spent inhibitors should be contained to prevent spills or leaching to the soil. Drums or containerized storage is preferred.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Reuse/reclaim if possible.

If reuse/reclaim not possible, contact the safety and environmental department for case bycase evaluation.

IRON SPONGE

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Wash thoroughly with a soda ash and water solution by circulating it through the bed for several hours to prevent auto-ignition. Can also be regenerated using this method. Incorporate soda ash solution into water disposal system.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY: There are no reporting requirements for the OCD. Keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, disposal facility, and any analytical results.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

LEAD ACID BATTERIES

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Recycle or return to vendor if possible.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Wear protective equipment and handle in manner to prevent spillage of acid. Store in vented area. Do not store on ground or cement slab.

RECORDKEEPING/REPORTING REQUIREMENTS:

1) DOT manifest for transport by vessel. 2) Retain copy at assigned locations. 3) Copy of MSDS.

Keep records of off-site recycling in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Return to vendor for exchange.

Local recycler.

LITHIUM BATTERIES

(Batteries used in Haliburton flow meters)

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Recycle or return to vendor if possible.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Wrap in shipping container provided by Haliburton. Store in a cool dry area.

RECORDKEEPING/REPORTING REQUIREMENTS:

1) Mailing receipts. 2) Copy of MSDS.
Keep records of off-site recycling in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Return to vendor.

MERCURY

WASTE CATEGORY:

Mercury is a listed hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.20 - 261-24). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

None if reclaimed or recycled, otherwise TCLP/Mercury and Total/Mercury.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Contact Safety & Environmental Manager prior to any mercury handling. Should be stored in air-tight, properly labeled containers.

RECORDKEEPING/REPORTING REQUIREMENTS:

Manifests or records of recycling. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details. No hazardous waste disposal is allowed in OCD-permitted facilities.

Contact safety department for recycling.

Dispose at an EPA permitted hazardous waste facility. Contact safety department.

MOLECULAR SIEVE

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Regenerate for reuse.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain all liquids and incorporate them into the water disposal system. Allow molecular sieve to cool in a nonhydrocarbon inert atmosphere. Hydrate in ambient air for 24 hours.

FOR SHIPPING OFFSITE, *no shipping requirements.*

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY: There are no reporting requirements for the OCD. Keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, disposal facility, and any analytical results.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Regenerate for reuse.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

NORM (Naturally Occurring Radioactive Material)

WASTE CATEGORY:

Special E&P Waste (Contact the Safety/Environmental Department). See Section 12 of the Manual for specific procedures for NORM handling and disposal in New Mexico.

WASTE MINIMIZATION:

None at this time.

TESTING:

Will be required for ground contamination and prior to disposal company acceptance. Check state rules.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Review company safety guidelines for handling NORM. Protect ground area with non-permeable material. NORM should be properly labeled and contained in an isolated area where there is restricted access to the public and employees. Area should be clearly marked.

RECORDKEEPING/REPORTING REQUIREMENTS:

Records generated for the disposal or storage of NORM should be maintained as active files.

DISPOSAL OPTIONS:

Do not dispose of NORM without approval of Safety/Environmental Department.

OILY RAGS - contaminated with lubricating oil.

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Use a contractor to supply clean rags and pick up used rags.

TESTING:

RECYCLING: The contractor may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store in containers marked for oily rags only. Keep cover of container secure when not transferring material. Do not mix with material that may be hazardous.

FOR SHIPPING OFFSITE, if **nonhazardous**, no shipping requirements. If **hazardous**, will need to review the shipping requirements. Contact EH&S, in Houston for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

RECYCLING: Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of material recycled.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Contract with a company to recycle used rags.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

PAINTING WASTES

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

Contact the Safety & Environmental Department.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Paints should remain in their original metal containers with tight fitting lids.

RECORDKEEPING/REPORTING REQUIREMENTS:

If waste is hazardous, manifests, test data, and disposal records must be retained for three years and archived for fifteen years. No recordkeeping is necessary for non hazardous disposal.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Unused paint should be applied to equipment and buildings to prevent corrosion and water damage. Empty containers may be disposed of in permitted landfills.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

PAINTING SOLVENT - used

WASTE CATEGORY:

Special - contact ES&H Deaprtment in Houston. Used painting solvent which is returned directly to condensate stream (hydrocarbon) without processing is not defined as a solid waste by the Resource Conservation and Recovery Act (RCRA).

WASTE MINIMIZATION:

None at this time.

TESTING:

Contact the Safety & Environmental Department.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Painting solvent should not be filtered, accumulated, stored or otherwise processed prior to returning to condensate stream.

RECORDKEEPING/REPORTING REQUIREMENTS:

No recordkeeping is necessary if painting solvent returned to condensate stream.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Do not process used painting solvent prior to returning to condensate stream. Processing creates a "solid waste" which may be subject to hazardous waste regulations.

PIGGING WASTE

WASTE CATEGORY:

Exempt waste under the Resource Conservation and Recovery Act (RCRA) if derived from gathering line; non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) if from distribution line. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

If non-exempt, TCLP; RIC analysis may be required. Contact Safety & Environmental Department

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Should be handled to prevent spills or leakage. Should be stored in rigid-walled, leak-proof containers.

RECORDKEEPING/REPORTING REQUIREMENTS:

Maintain manifest or run ticket for a minimum of three years if off-site disposal is utilized and records archived for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

If exempt, liquids can be disposed of at a Class II injection well. Solids need to go to an oil and gas permitted facility. If hazardous or non-exempt, contact the safety & environmental department.

PLANT TRASH - includes paper, cardboard, plastic containers, glass. Does not include items such as aerosol cans, paint cans, pesticides, batteries or flammables.

WASTE CATEGORY:

Inert nonhazardous solid waste. Inert wastes can be disposed at a facility permitted by the New Mexico Oil Conservation Division or a permitted landfill.

WASTE MINIMIZATION:

None at this time.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store in labeled bins. Do not mix with material that is contaminated or may be hazardous.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

Keep Bill of Lading, run ticket, other billing information that documents the generator, transporter, disposal site, and volume of material disposed. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Recycle paper, cardboard, glass, aluminum and plastics.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

PROCESS WASTEWATER

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR DISPOSAL WELL: this waste must be tested for ignitability, corrosivity, reactivity, Toxicity Characteristic Leaching Procedure (TCLP) metals and organic compounds. If the generator can prove by knowledge of process that this waste is not hazardous then no testing is required. The generator must provide information concerning the process and the chemicals used in the process.

FOR DISCHARGE PER NPDES PERMIT: comply with testing requirements of the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store water in holding vessels such as sumps, storage tanks, or evaporation pits prior to disposal. Tanks and pits that might contain oil should be flagged, netted, or otherwise covered to protect wildlife.

FOR SHIPPING OFFSITE, if **nonhazardous**, no shipping requirements. If **hazardous**, need to review the shipping requirements and possibly test. Contact EH&S for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ON-SITE DISPOSAL: maintain records per Class II permit or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

IF NONHAZARDOUS, Class II disposal well (on-site or off-site) permitted **for disposal of gas plant wastewaters**; **OR**, If specified in the permit, NPDES discharge.

IF THIS WASTE IS HAZARDOUS: it can be disposed in a Class I Hazardous disposal well; **OR**, if specified in the permit, NPDES discharge.

PRODUCED WATER

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988) The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Regenerate for reuse.

TESTING:

None required

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Should be handled in a manner which prevents spillage onto ground or other surface and stored in rigid-walled containers.

RECORDKEEPING/REPORTING REQUIREMENTS:

State injection well regulations require that records be kept of volumes injected, annular pressures, origin of produced water. These records are required to be kept for a period of threeyears, and then should be archived for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Produced water can be injected into a state permitted Class II injection well.

SANDBLAST MEDIA

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Disposal of sandblast media used by a contractor remains the responsibility of that contractor.

TESTING:

Test for TCLP metals.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Enclose area to be blasted to collect media. Use proper personal protective equipment. Store in rigid-walled containers, or in 5000# polyurethane sacks.

RECORDKEEPING/REPORTING REQUIREMENTS:

All off-site disposal records should be maintained as active files for three years and archived for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Disposal of sandblast media used by a contractor remains the responsibility of that contractor. If non-hazardous, recycle for reuse. Company generated sandblast media should be analyzed for TCLP metal content prior to disposal. Refer laboratory results to the Safety & Environmental Department.

SEWAGE

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA). Local authorities typically have jurisdiction over sewage disposal (either in a sewer system or via septic tank). OCD has authority over sewage disposal when it is mixed with an oilfield waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

None.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Should be handled in a manner that minimizes exposure to workers. Adequate sanitary procedures should be implemented. For- long term operations, a septic system may be desirable. Septic systems must be permitted by state or local authorities.

RECORDKEEPING/REPORTING REQUIREMENTS:

Local authorities may have specific recordkeeping or reporting requirements.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Disposal in local sewer system (requires sewer connection).

Can be disposed of in an on-site septic system or by a commercially owned sanitation service.

SCRAP METAL - uncontaminated.

WASTE CATEGORY:

Nonhazardous solid waste. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

Testing is not required unless contamination or scale is present. Review the Warren Petroleum Company policy on testing for Naturally Occurring Radioactive Material (NORM).

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store in areas designated for scrap metal. Do not mix with contaminated or hazardous material.

FOR SHIPPING: if not radioactive then no shipping requirements. If **radioactive**, call EH&S in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, recycle site, and volume of scrap recycled. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

SILICA GEL

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Drain all liquids and allow silica gel to dry for 48 hours. Incorporate fluids into water disposal system.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD FACILITY: There are no reporting requirements for the OCD. Keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, disposal facility, and any analytical results.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

SOIL CONTAMINATED WITH CRUDE OIL

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Check equipment on a regular basis for leaks, spills. Repair or replace leaking equipment immediately. Use sorbent pads to prevent spills from contaminating the soil.

TESTING:

LANDFARM ONSITE: Total Petroleum Hydrocarbons (TPH) by Method 418.1 and leachable chlorides.

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Contaminated soils must be cleaned up. For small, localized spills remediate by tilling soil and adding fertilizer. For remediation (such as landfarming) of large quantities of soil onsite the OCD may have site specific handling requirements. Contact the OCD District Office (Sectioon 13) for specific guidelines.

FOR SHIPPING OFFSITE, contact EH&S for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

LANDFARM ONSITE: For large spills, send a letter to the District Office detailing the landfarm procedures, the quantity of soil involved, and receive written approval from the District.

DISPOSAL OR LANDFARMING AT AN OCD FACILITY: Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of soil to be treated or disposed.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Landfarm onsite if permitted by disposal plan.

Landfarm or disposal at OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

SOIL CONTAMINATED WITH LUBE OIL

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Check equipment on a regular basis for leaks, spills. Repair or replace leaking equipment immediately. Use sorbent pads to prevent spills from contaminating the soil.

TESTING:

LANDFARM ONSITE: Total Petroleum Hydrocarbons (TPH) by Method 418.1 and leachable chlorides.

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Contaminated soils must be cleaned up. For small, localized spills remediate by tilling soil and adding fertilizer. For remediation (such as landfarming) of large quantities of soil onsite the OCD may have site specific handling requirements. Contact the OCD District Office (Section 13) for specific guidelines.

FOR SHIPPING OFFSITE, contact Compliance for specific requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

LANDFARM ONSITE: For large spills, send a letter to the District Office detailing the landfarm procedures, the quantity of soil involved, and receive written approval from the District.

DISPOSAL OR LANDFARMING AT A OCD FACILITY: Keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of soil to be treated or disposed.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Landfarm onsite if permitted by the disposal plan

Landfarm or disposal at OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

SOLVENT, HAZARDOUS - this material is either a listed hazardous waste according to 40 CFR 261.31 or is characteristically hazardous according to 40 CFR 261.21-24. The characteristics of the solvent are on the Material Safety Data Sheet (MSDS).

WASTE CATEGORY:

Non-exempt hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Use water-based solvents or detergents when possible.

TESTING:

If the waste is a listed hazardous waste per 40 CFR 261.31, then no testing is necessary. If the waste could be characteristically hazardous waste test for Ignitability, Toxicity Characteristic Leaching Procedure (TCLP) metals and organics, Reactivity and Corrosivity. The MSDS may have specific information regarding the solvents hazardous status. If the generator can prove by knowledge of process that the solvent is not hazardous then no testing is required. The generator must provide information about the chemical composition of the solvent and about the processes in which it was used.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Do not mix waste solvents with materials that are not hazardous. Nonhazardous waste mixed with a listed hazardous waste is automatically hazardous and increases the volume of hazardous waste that must be treated and disposed.

Store in containers for "Used Solvent" Only. Keep cover secure when not transferring material. Containers should be stored on an impervious surface and/or in a covered area. For conditionally exempt small quantity generators (CESQG) (generators producing less than 220 lbs per calendar month) do not accumulate more than 2200 lbs (1,000 kilograms) onsite at any one time. If the generator accumulates more than 2200 lbs onsite at any one time, then the generator must meet the requirements of a small quantity generator or large quantity generator depending on the volume of waste onsite.

FOR SHIPPING: the hazardous nature of this solvent will determine which shipping requirements to follow. Contact EH&S in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR CESQGs: keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of material recycled or disposed. The generator may have to obtain an EPA identification number; many disposal facilities will not accept waste, regardless of generator status, without an EPA identification number. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Contract with a company to recycle waste solvents.
Dispose at a disposal facility permitted to accept waste solvent.

SOLVENT, NONHAZARDOUS - this material does not contain listed hazardous wastes (40 CFR 261.31) and is not characteristically hazardous (40 CFR 261.21-24). The characteristics of the solvent are on the Material Safety Data Sheet (MSDS).

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

If the generator can prove by knowledge of process, including information on the MSDS, that the waste is not characteristically hazardous and has not been combined with a listed hazardous waste, no testing is required. If the waste could be characteristically hazardous, then test for ignitability, Toxicity Characteristic Leaching Procedure (TCLP) metals and organics, corrosivity, and reactivity.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store spent solvent in a sealable container or combine with slop oil or condensate. Do not mix with material that may be hazardous. Containers should be stored on an impervious surface and/or in a covered area.

FOR SHIPPING: the specific nature of the solvent will determine the applicable shipping requirements. Contact EH&S in Houston for specific instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

IF COMBINED WITH SLOP OIL, CONDENSATE OR SENT TO A RECYCLER: keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of material recycled. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Recycle by combining with slop oil or condensate for sale.

Contract with a company to recycle waste solvents.

SORBENT PADS - CONTAMINATED WITH CRUDE OIL.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

DISPOSAL AT A OCD-PERMITTED FACILITY: each OCD-permitted facility may have specific testing requirements.

RECYCLE: each recycler may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Remove all free oil by washing to reduce the TPH concentration and return to oil storage tanks. Store pads in containers marked for sorbent pads only. Keep cover of container secure when not transferring material. Do not mix with material that may be hazardous.

FOR SHIPPING OFFSITE, no shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD FACILITY OR RECYCLER: There are no reporting requirements for the OCD. Keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, disposal facility, and any analytical results.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.
Recycle.

STORMWATER

WASTE CATEGORY:

Special E&P Waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

Test for chlorides. Check for oil sheen.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Uncontaminated stormwater should be allowed to run-off the location as needed. Stormwater collected behind firewalls should not be discharged if it contains a "sheen". Stormwater should not be stored when it prohibits adequate storage volume within diked areas for spill prevention.

RECORDKEEPING/REPORTING REQUIREMENTS:

Diked areas refer to SPCC. If stormwater is taken to an injection well for disposal, a run ticket should be retained for a period of three years.

DISPOSAL OPTIONS:

Uncontaminated stormwater should be allowed to escape from location into natural drainage pathways.

Stormwaters containing a "sheen" should have the sheen removed and then be allowed to escape into natural drainage pathways.

SUMP SLUDGE - from all sumps onsite.

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) and must be characterized to determine if hazardous. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

FOR RECLAIMING, DISPOSAL PER CLASS II DISPOSAL WELL, OR OCD-PERMITTED DISPOSAL PITS: waste must be classified to determine if the waste is hazardous. Test for Toxicity Characteristic Leaching Procedure (TCLP) metals and organics, reactivity and ignitability. Use the Paint Filter Liquids test to determine if sludge contains free liquid. If free liquids are present test for corrosivity. If the generator can prove that the waste is not hazardous, then no testing is required. The generator must provide information on the chemical composition of the waste and the process from which it was produced.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Removal of sludge from sumps should be done in such a manner ad to minimized spillage. Use drip pans or catchment basins. Remove all free liquids. If nonhazardous, mix solids with wastewaters for disposal via Class II disposal well. For storage onsite prior to disposal place in drums, tanks, or other closed/covered containers or dispose immediately upon removal of bottoms from tanks.

FOR SHIPPING: if **nonhazardous**, no shipping requirements. If **hazardous** contact EH&S in Houston for specific shipping instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT AN OCD FACILITY (including commercial disposal wells or waste pits): There are no reporting requirements. Keep Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, the generator, transporter, disposal site, and analytical results.

FOR ONSITE DISPOSAL WELLS: maintain records per Class II disposal well permit.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted **to accept gas plant wastewaters**.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

TANK BOTTOMS - from crude oil tanks.

WASTE CATEGORY:

Exempt from regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

RECLAIMING: None required.

FOR RECLAIMING, DISPOSAL PER CLASS II DISPOSAL WELL, OR TRC-PERMITTED DISPOSAL PITS: the OCD does not require testing. However, each OCD-permitted disposal pit may have specific testing requirements.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Removal of bottoms from tanks should be done in such a manner ad to minimized spillage. Use drip pans or catchment basins. Remove and reclaim all free oil. Mix solids with wastewaters for disposal via Class II disposal well. For storage onsite prior to disposal place in drums, tanks, or other closed/covered containers or dispose immediately upon removal of bottoms from tanks.

FOR SHIPPING OFFSITE, contact EH&S for specific shipping instructions.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A OCD FACILITY (including commercial disposal wells or waste pits): There are no reporting requirements. Keep Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, the generator, transporter, and disposal site. FOR ONSITE DISPOSAL WELLS, maintain records per Class II disposal well permit.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

Class II disposal well (onsite or offsite) permitted **to accept gas plant wastewaters.**
OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

USED OIL - includes any oil refined from crude oil, or any synthetic oil, that has been used and as a result of such use if contaminated by physical or chemical impurities (40 CFR 279.1; 57 FR 41613).

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Inspect tanks or containers on a regular basis for leaks or spills and to confirm that storage units are in good condition.

TESTING:

RECYCLING: each recycler may have specific testing requirements (such as total halogen) prior to accepting used oil. No testing required when combined with scrubber oil or condensate for sale.

DISPOSAL: used oil must be recycled in the State of Texas.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Store in tanks or containers marked "Used Oil". Tanks and containers must be in good condition (Generators storing used oil onsite must comply with applicable requirements of 40 CFR 112 Spill Control and Countermeasures plan for used oil storage units). Keep cover secure when not transferring material. Leaks or spills must be contained and repaired immediately; releases to the environment must be cleaned up.

Shipments of used oil of 55 gallons or less may be transported by the generator in their own vehicles and without obtaining an EPA identification number. An EPA registered transporter must be used for shipments of more than 55 gallons of used oil. Generators transporting more than 55 gallons must obtain an EPA identification number and comply with all requirements of 40 CFR 279 Subpart E.

Do not mix used oil with material that may be hazardous.

FOR SHIPPING OFFSITE, if **nonhazardous**, no shipping requirements. If **hazardous**, need to review shipping requirements and possibly test. Contact EH&S in Houston for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

DISPOSAL AT A PERMITTED RECYCLER: keep copies of Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of oil shipped as well as any analytical results and certification forms required by recycler.

WHEN COMBINED WITH SCRUBBER OIL OR CONDENSATE: keep Bill of Lading, run ticket, or other billing information that documents the generator, transporter, disposal site, and volume of oil sold.

Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

Combine with scrubber oil or condensate for sale.

WASH WATER

WASTE CATEGORY:

Non-exempt solid waste under the Resource Conservation and Recovery Act (RCRA)(40 CFR 261.4(b); 53 FR 25453-25454, July 6, 1988). The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

None at this time.

TESTING:

For DISPOSAL WELL: this waste must be tested for corrosivity, reactivity, ignitability and Toxicity Characteristic Leaching Procedure (TCLP) metals and organic to characterize the waste. If the generator can prove by knowledge of process that this waste is not hazardous, then no testing required. The generator must provide information on the chemical composition of the waste and the process from which it was derived.

For NPDES DISCHARGE: comply with testing specified in the permits.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

Collect in storage vessel such as sump, storage tank or evaporation pit prior to disposal.

FOR SHIPPING OFFSITE, if **nonhazardous**, no shipping requirements. If **hazardous**, need to review shipping requirements and possibly test. Contact EH&S in Houston for specific shipping requirements.

RECORDKEEPING/REPORTING REQUIREMENTS:

FOR ONSITE DISPOSAL: maintain records per Class II or NPDES permit.

FOR DISPOSAL AT COMMERCIAL FACILITIES: keep copies of Bill of Lading, run ticket, or other billing information that documents the type and volume of waste, generator, transporter, and disposal facility. Keep records of off-site disposal in active files for three years and archive for fifteen years.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

IF NONHAZARDOUS: Class II disposal well (onsite or offsite) permitted to dispose of gas plant wastewaters; **OR**, If specified in the permit, discharge per NPDES permit.

IF THE WASTE IS HAZARDOUS, it can be disposed in a Class I Hazardous disposal well; **OR**, if specified in the permit, NPDES discharge

WOODEN PALLETS

WASTE CATEGORY:

Inert nonhazardous solid waste. The New Mexico Oil Conservation Division has jurisdiction over the management of this waste.

WASTE MINIMIZATION:

Return to vendor or sell.

TESTING:

None required.

MANAGEMENT, STORAGE AND TRANSPORTATION INSTRUCTIONS:

No special handling requirements..

RECORDKEEPING/REPORTING REQUIREMENTS:

No recordkeeping required.

DISPOSAL OPTIONS:

All waste disposal in New Mexico is regulated by OCD through facility-specific "discharge plans" that are designed to provide "protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids." See Section 12 for details.

OCD-permitted disposal facility. See Section 12 for a complete and current list of facilities.

On-site burial if allowed by the discharge plan. Consult lease requirements and landowner for any additional requirements.

Subpart 1

General Procedures For Sample Collection and Analysis

Contact and use an EPA certified laboratory for all sampling. State and Federal regulations set strict sampling requirements for various substances. Using a properly certified lab will save time and money in the long run. A good lab will usually furnish all the sample equipment, labels and forms necessary to do a good sampling job.

Samples should be collected by personnel wearing clean, unused latex gloves. During sample collection, particular care should be taken to prevent contamination of the sample and container. A sample collected for laboratory analysis should be placed directly into the appropriate container(s) that are properly labeled.

Samples should be placed into individual airtight plastic bags, and stored in an ice chest approximately 1/4 filled with bagged ice. The containers, labels, and empty ice chests should will be provided by the laboratory.

Exhibit I shows an example of a completed sample label that includes project name, number, and location, sample point and identification, person and company conducting the sampling, sample date and time, and required analyses. The laboratory forms may differ but should include the above listed information.

The sampler should keep a record of all samples collected and show the location of the samples on a sketch of the facility. These records (and sketch) should be kept in afield notebook which should be kept in the project file.

After all necessary containers have been filled, a chain-of-custody form (provided by the laboratory) should be completed. This document should include all the samples collected, with the parameters and analytical methods specified (discussed below). The chain-of-custody form should be signed and dated (along with time relinquished), and sent with the samples to the laboratory. Exhibit 2 shows an example of a completed chain-of-custody document.

The laboratory should be notified approximately two days prior to the sampling to allow time for delivery of the sampling equipment, and should be contacted during the day of the sampling in order to send a courier to pick up the samples or to ensure they know the samples are being delivered by company personnel.

Because of laboratory schedules and sample holding time limitations, sampling should be planned for the early part of the week.

Ensure the lab analyzes the sample and sends the report with the parameters set forth in the permit or regs. For example, if the permit limits are in ppm then the report should state the results in ppm.

Subpart 2

Types of Samples

Selection of the type of sample to take is usually directed by the specific permit or regulation. There are generally two different types of samples used in water or waste sampling.

Discrete or Grab Samples - These are samples collected at selected intervals, and each sample is retained separately for analysis. Usually, each sample is collected at a single point in the discharge or storage container.

Composite Samples - Simple composite samples are those made up of a series of smaller samples know as aliquots. These samples should be taken at regular time intervals or locations in the sampling stream or storage device. It is important they be similar in size and content.

Sampling Locations

The proper location for taking a sample is usually the actual discharge point and is very important in ensuring a representative and accurate analysis. It is also necessary to have awareness of the general character of water flows and knowledge of the variability of the pollutant concentration. Some of the considerations necessary in selecting a proper location are:

- Make sure to sample the proper point. For a combined process/stormwater outfall, make sure to sample below the confluence point.
- Be sure the sampling site provides the information desired. This includes familiarity with the water discharge system including inflow and outflow.
- Make sure there is no cross contamination of the sampling stream from othersources, such as fresh water in a stream or other pollutant discharge points.
- Locate the sample point in a straight length of pipe or discharge conveyance(ditch etc.).
- Make sure the sampling point is easily accessible and safe. Areas with turbulent water flows should be avoided.
- Finally. make sure the sample point is in compliance with any permit, regulation or guidance document that lists specific requirements.

Subpart 3

Water npling

Appropriate Sample

Sample should be collected during a dry period when no rainfall is expected for at least 24 hours

Do not sample within 24 hours prior to a weekend or holiday

General Sampling Guidelines

Use clean latex gloves prior to collection of each sample

Use clean sampling containers between grab sample and each composite sample at each location

Collect samples from the center of the discharge flow channel.

Record all pertinent sampling data on the chain-of-custody.

Use preprinted labels provided in the sampling kit to label each sample container.

Seal, label, bag, and ice down each sample immediately after collection

Make certain the laboratory preserves the samples within 24 hours of collection. Some laboratories ship sample containers already containing the required preservative. Call the lab to discuss any special handling requirements or precautions for preserved samples.

Sample Collection

Collect a grab sample for laboratory analysis of oil and grease and field analysis of temperature and pH.

An additional grab sample will be required for analysis of fecal coliform. After filling the appropriate sample containers for laboratory analysis of fecal coliform and oil and grease, immediately measure the temperature and pH of a portion of the sample, and record all pertinent data in the field notebook.

Collect a composite sample. This process involves collecting a minimum of 8 separate samples at periodic intervals during the operating hours of the facility over a 24 hour period, filling a complete set of sample containers for each sample (samples will be composited by the laboratory), and recording all pertinent sampling information upon completion of sampling.

Quality Assurance/Quality Control

Collect a single field blank from each sampling location at some point during a composite sampling event. This process involves pouring deionized water into a clean sampling device and then pouring this water into the two 40 ml glass vials, label and bag the field blank sample, and place the sample in an ice chest to accompany the samples to the laboratory. When collecting field blanks, the vials must be completely filled with fluids, allowing no headspace or air bubbles.

Trip blanks are provided by the laboratory with the sample containers. After all samples have been collected, label and bag the trip blank and place one trip blank into each ice chest to accompany the samples to the laboratory.

Sample Analysis

Each grab sample will be analyzed by the laboratory for oil and grease and a portion of the sample will be analyzed for temperature and pH in the field.

Each composite sample will be analyzed by the laboratory for the parameters required by the permit or regulation such as: BTEX, ammonia, total suspended solids, biological oxygen demand (5 day), chemical oxygen demand, and total organic carbon.

Table B-1 of the Sampling and Analysis Plan summarizes the analytical parameters and method numbers to be included on the chain-of-custody form.

Chain-of-Custody Form

For each sampling event, complete the chain-of-custody form (in ink) to include project name and numbers, transportation information and name of the laboratory. For each sample, the chain-of-custody will include: identity of sample, date and time collected, name and significant collector, number of containers, sample matrix, and analytical requirements.

Sample transfers will be evidenced on the chain-of-custody form by signature of the receiver and relinquisher until final delivery to the laboratory. Place the chain of-custody in a plastic (zip lock) bag inside the ice chest to accompany the samples to the laboratory. An example copy of a completed chain-of-custody form is included as Exhibit B-3.

Place the chain-of-custody in a plastic (zip lock) bag inside the ice chest to accompany the samples to the laboratory. An example copy of a completed chain-of-custody form is included as Exhibit A-3.

HAZARDOUS WASTE STORAGE

There are very few compliance requirements with respect to storing hazardous waste. You have only three principal compliance concerns under RCRA:

1. Time limits for storing hazardous waste

2. Quantity limits for storing wastes as an SQG

3. Container and area management standards.

The primary reason for the scarcity of hazardous waste storage requirements under RCRA is that *the storage of hazardous chemicals is regulated in most communities by fire prevention and building regulations.* Decisions concerning inside or outside storage of wastes and procedures for management of the wastes should therefore be made only after talking with your building inspector or fire chief.

Before we move on, let's illustrate the basics. The chart below summarizes the important compliance information with respect to storage time and quantity limits.

Now, let's discuss these important compliance requirements further.

The Basics

Generator Type	Federal Storage Limit	Federal On-Site Quantity Limit
Large-Quantity Generator	90 days	none
Small-Quantify Generator	180 days(or 20 days, if applicable)	>6,000 kg (13,200 lbs)
Very Small-Quantity Generator	No time limit until 1,000 kg, then 180/270 days	<1,000 kg (2,200 lbs)

*** State laws may vary; consult local authorities**

Time Limits

SQGs are permitted to store wastes for up to 180 days.

In most states, the accumulation date begins when the first drop of hazardous waste is placed in a hazardous waste drum or container.

However, some states may allow accumulation to begin on the date the SQG exclusion (100 kg) is first exceeded. Check your state agency to learn the requirements you need to follow.

The 180-day accumulation period may be extended to 270 days if the wastes must be transported over 200 miles to a licensed treatment, storage, or disposal facility (TSDF).

SQGs should *never* store wastes beyond the 180-day (or 270-day) limit because they become subject to burdensome requirements as a permitted storage facility. Inspectors will review manifests carefully to determine that you have not exceeded the time limit. If you have, expect hefty fines.

SQGs that enjoy a busy month and generate greater than 1000 kg of hazardous waste find themselves classified by EPA as a "large-quantity" generator for that month and therefore must: (1) ship wastes off-site within 90 days, (2) meet additional emergency planning standards, and (3) comply with the training requirements.

Plan ahead so that the profits of a "good month" don't disappear meeting additional environmental compliance requirements.

Quantity Limits

You also have another concern: you must keep track of how *much* waste you accumulate. If you exceed the on-site quantities listed in the third column of the previous chart, you trigger additional compliance requirements:

If you are a conditionally exempt generator and accumulate more than 1,000 kg of hazardous waste (five 55-gallon drums), you become classified as an SQG and must legally dispose of your hazardous wastes within 180 days

If you are an SQG and accumulate more than 6,000 kg of hazardous waste (thirty 55-gallon drums), you become a storage facility and must comply with much more-complex TSDF requirements.

Container Management Rules

In addition to time and quantity limits, you must also maintain the integrity of the containers holding your hazardous wastes. The majority of container management standards are *commonsense rules* enacted to protect you and the environment. Here's a list of the rules to follow:

1. Mark each container with the words "Hazardous Waste" and the date when accumulation began (it's also wise to include a clear description of the waste). Standard labels are available for this purpose;

2. Keep containers in good condition;

3. Keep wastes in containers designed to store these materials without rupturing, leaking, or corroding;

4. Handle containers carefully;

5. Immediately replace leaking containers or drums;

6. Keep containers closed except when transferring waste into or out of the container; and

7. Inspect containers for leaks or corrosion every week.

In addition, there are also "area" standards under RCRA. These include:

8. Maintain adequate aisle space between drums to ensure easy access and inspection;

9. Take particular precautions when storing ignitable or reactive wastes—keep such waste away from sources of ignition and store them at a safe distance from each other and from property lines; and

10. Place "No smoking" signs conspicuously wherever ignitable wastes or reactive wastes are stored.

Pay heed to these rules! One of the most frequent violations found by EPA inspectors is a failure of SQGs to meet the container management standards. The most prevalent violations are failure to place the "Hazardous Waste" label on each container, to maintain containers in good condition, to close lids and bungs on containers, and to separate incompatibles.

Some Special Cases

The rules described to this point apply to 100 percent of all SQGs. You must comply. Some generators must also meet additional special storage requirements.

Tanks

If you store hazardous waste in tanks, you must meet, among other standards, the following stringent and expensive requirements:

· Use double walls, external liners, or concrete vaults to provide secondary containment for the tank containing hazardous waste;

· Keep the tank covered or provide at least two feet of space at the top of the tank ("freeboard") in uncovered tanks;

· Utilize waste feed cutoff or bypass systems where waste flows into tanks continuously;

· Install leak detection equipment;

· Inspect the required monitoring or gauging system daily; and

· Comply with applicable National Fire Protection Association (NFPA) codes.

Satellite Accumulation Rule

The *satellite accumulation rule is* a handy exception to the storage requirements. This rule allows firms to collect hazardous waste in the workplace at the point of generation without having to immediately begin the "accumulation clock." To make use of this exception, the following requirements must be met:

· The container cannot exceed 55 gallons;

· The container must be located at or near the point of hazardous waste generation;

· Management of the container must be under the control of the operator of the process that generates hazardous waste; and the container must be labeled "Hazardous Waste" or must use a more descriptive term, such as "spent petroleum distillates."

This special rule may be particularly useful for certain small manufacturing operations and firms that continuously generate small amounts of hazardous waste.

For example, some small electronics firms using small amounts of solvents to clean soldered wafer boards often utilize the satellite accumulation rule. At regular intervals, these containerized wastes are transferred to the hazardous waste storage area.

And Don' Forget ...

Storing hazardous waste increases the risk of accidents, spills, and fires. Therefore, *storing hazardous waste triggers certain emergency planning and response requirements.*

- Identification of at least one employee on the premises or on call as the emergency coordinator

- Posting of emergency contact next to the telephone

- Familiarizing employees with emergency response

Outside Storage

Storage of Hazardous Waste Triggers

There are no EPA requirements that mandate either indoors or outdoors storage. Yet the decision is especially important for many small firms because of space and cost considerations.

Outdoor storage is often the choice for small firms, such as vehicle maintenance shops, because of a lack of space indoors and because commonly found solvent wastes may pose a fire threat indoors. If you store wastes outside, the following safeguards should be met:

. Access to the hazardous waste storage area should be restricted to employees

· The floor of the storage area should be impenetrable to the hazardous wastes

· Any ignitable or reactive wastes should be shaded from sunlight

· Drums and containers should be protected from precipitation

· Applicable flammable and combustible fire codes should be met.

Hazardous Waste Storage ... *at a Glance*

Storing hazardous wastes needn't be complicated if you follow this sequence:

· Store only in containers that are in good condition, and compatible with the waste they contain: Mark each container "Hazardous Waste" and note on the outside the date accumulation began and the nature of the waste contained.

· Inspect containers for leaks or corrosion at least weekly, more often if possible.

· Limit access to the storage area to authorized and trained personnel.

· If storing outdoors, consider that moisture can cause corrosion or react with certain wastes. Indoor storage is usually better.

· Indoor storage is preferred because public access, precipitation, and , heat are not a concern. However, building and fire codes can prove to be a problem. For SQGs that generate small

amounts of hazardous waste, such as the spent dry-cleaner filter cartridges, still residues, and powder residues, storage in a small isolated room or area within the facility may be the best choice.

· Under federal SQG law, store no longer than 180 days (or 270 days if shipping wastes beyond 200 miles). State laws may allow less time.

· As an SQG, never accumulate more than 6,000 kg (about thirty 55 gallon drums). Conditionally exempt SQG's can store only 1,000 kg. Again, state laws may allow less.

And keep storage records—*in a separate location of* what's been stored, how much, when, and by whom. If there's a problem with your stored wastes, this information can prove invaluable.

Drum Separation and Storage

Although it is not a regulatory requirement, it is important to separate empty or "spent" drums from "full" drums. Once a drum is completely empty, tip it over (first making sure that no residue remains), and leave it horizontal so that it will not collect rainwater at its lip. "Dead drums" should be classified as drums that will be (1) reconditioned, (2) returned to a chemical vendor, (3) sold for scrap to barrel refinishers, or (4) disposed of in a landfill (except those contaminated by wastes no longer accepted at landfills).

Empty-barrel management decisions should be made when you are purchasing chemicals. If you are returning drums to your supplier, you should have a purchase agreement that guarantees the use of returnable containers.

Although the use of returnable containers often requires deposits, this is often an SQG's preferred choice. If you are contracting with a barrel reconditioner, you should request that chemicals be supplied in drums of 18-20 gauge steel. Of your disposal choices, your least preferred should be disposing of the container in a landfill.

Dictated by EPA:

a. Mark each container with the words "Hazardous Waste."
b. Keep containers of hazardous waste stored on their sides so that they will not collect water on the top lip.
c. Keep containers closed except when transferring waste into or out of the container.
d. Inspect containers for leaks or corrosion daily.
e. Do not keep incompatible wastes side-by-side.
f. Keep wastes in DOT-specified containers designed to store these materials without rupturing, leaking, or corroding.

Thus far, we've covered the laws that control you as a generator of hazardous wastes, how to determine if you generate such waste, how to notify the government about it, and how to handle the material on-site. Most regulations covering these topics have their basis in RCRA or equivalent state law.

But when it comes to moving wastes off your property, RCRA is not the only set of regulations to be concerned with. The Department of Transportation's Hazardous Materials Regulations must be complied with as well, before wastes can be shipped to a treatment, storage, or disposal facility (TSDF).

Too often, these regulations are overlooked because the transportation regulations are not spelled out in RCRA, but are, rather, adopted by cross-reference. This means that they are simply referred to, not expansively detailed.

Overview of the DOT Regulations

DOT's Hazardous Materials Regulations cover the transportation of more than 30,000 hazardous materials: hazardous wastes are included in this very large universe of chemicals. The transportation regulations were enacted to ensure that hazardous materials are packaged and contained adequately and that the hazards of the material in a package or container are communicated fully to those who have to handle it. The requirements are not difficult to understand or to comply with.

As in the section on waste determination, most smaller manufacturers will also have their wastes fall easily into DOT classifications. But some small manufacturers with potentially unique wastestreams may have to search the regulations or seek additional guidance.

Pretransport compliance information should be available from your chemical vendor, waste hauler, or state transportation agency.

Specific DOT Requirements

There are six items to address when preparing wastes for shipment. The sequence of decisions that you must make or information that you must obtain and supply is outlined below. Let's briefly explore each step in the process:

Hazardous Waste Determination
|
DOT Shipping Name
|
Hazard Class
|
UN/NA Number
|
Labels
|
Placards

Step 1: Hazardous Waste Determination

Your first step in meeting the pretransport requirements is to determine what manner of beast you are dealing with under RCRA. Is your waste a listed waste or a characteristic waste? What is its code? Is it an F or a D waste; perhaps, it's a K waste. And what is the specific code for that waste? Is it F002 or F004? D001 or D002. Once they've been made, you can move on to what the next government agency—the Department of Transportation—asks of you.

Hazardous Wastes under DOT

What they ask is correctly identifying the waste in DOT terms. You would need to go to the regulations to see if your waste is listed in the DOT Hazardous Materials Table (49 CFR 172).

We will not describe this table in detail, but it is important to know that the with accompanying regulations, is the source of the three most important items of pretransport compliance information:

1. The hazard class to which the material belongs,

2. The shipping name, and,

3. The packaging, labeling, and special requirements.

The DOT Hazard Class

· DOT lists all hazardous materials by hazard class—the general type of material which emergency services would have to handle in an accident. Typical SQG wastes fall into a few of these categories. The table below lists typical classes, into which many wastes fall. Some examples of SQG wastes include the following classes:

Flammable Liquid
Flammable Solid
Organic Peroxide
Flammable Gas
Irritating Material
Poison B
Blasting Agent

Combustible Liquid
Oxidizer
Corrosive
Nonflammable Gas
Poison A
Explosives (Class A-C)
Other Regulated Materials
(ORM: A through E)

As you compare these classes against the wastes you generate, don't become confused that DOT's categories don't necessarily match EPA's categories of characteristic wastes. For example, EPA's "ignitable" wastes may be either "flammable" or "combustible" under DOT, depending on the exact flash point.

Example: A vehicle maintenance shop that generates transmission fluid and parts-cleaner wastes might ship the transmission fluid wastes as a *DOT flammable* liquid while the spent parts-cleaner

solvent would be a DOT *combustible* liquid. This is the case, even though EPA views both as characteristic *ignitable* wastes.

DOT Shipping Name

Once you've identified a waste's hazard class, you now need its shipping name. If a material is in the DOT table, classification by shipping name is easy:

A proper DOT shipping name for a hazardous waste that is listed in the DOT table or that is classified in a DOT hazard class consists of the name of the hazardous material or class, preceded by the word "waste."

For example, the shipping name for spent acetone might be "waste acetone," or the shipping name for spent paint thinners, since no specific chemical name is given, might be "waste flammable liquid."

Many Wastes Are Not in the Table

A hazardous waste that is not identified in the DOT table, and that does not fall neatly into one of DOTs hazard classes, is called an *n.o.s. (not otherwise specified) waste* and is classified as an ORM-E (Other Regulated Material—E) waste by DOT. These "classless" wastes are subject only to DOT marking and general packaging requirements. Examples of ORM-E classified wastes are paint wastes with heavy metals and dry-cleaning waste.

Note: A *recent DOT rule—which has been challenged in the courts— requires a chemical's technical name, rather than n.o.s. entries or trade names, on all shipping papers. This change, as of June 1989, differs from the old way of doing things when the shipping name for these wastes would be "hazardous waste liquid n.o.s." Check with your waste hauler or state agency as to the latest status on this disputed rule change.*

You are advised to verify all DOT shipping names, hazard class determinations, and UN/NA Numbers with your waste hauler or an individual with regulatory expertise before completing the manifest, as other DOT descriptions and identification codes may be applicable in some specialized circumstances.

Dismantlers and recyclers may transport batteries to a scrap processor or recycle without complying with most hazardous waste transportation regulations, provided that no other hazardous materials are being shipped, the batteries are properly braced and properly protected from other material in the vehicle, and the entire shipment is the properly of the shipper.

Steps 2 to 6: Packaging, Marking, Labeling, Placarding

The correct classification of wastes under DOT specifications is the first pretransport requirement. The second task is to meet all packaging, labeling, marking, and placarding requirements. These are summarized below:

Packaging Must Be Compatible and Appropriate to Disposal Means

Wastes must be packaged properly, according to DOT regulations. For hazardous waste, the most important responsibility is choosing a container that is compatible with the waste. While the packaging

Meeting the Pretransport Requirements

Requirements are potentially quite diverse, most SQG waste will be placed in 55-gallon containers, 5-gallon containers, or lab packs. It is important to note that filters, still bags, and contaminated rags can be placed in an open-ended drum which has a lid that closes securely.

In addition to choosing a container that is compatible with the waste, it is important to keep in mind the ultimate fate of the waste. For example, plastic or fiber drums may be preferred for solvent wastes that will be incinerated.

Markings Must Be Complete

For shipping hazardous wastes, the EPA requires special package markings that:

1. Identify the cargo as hazardous waste,
2. Identify the shipper (generator),
3. Show the manifest document number, and
4. Indicate that federal law prohibits improper disposal of wastes. Here's an example of a correctly detailed marking:

Proper DOT
Shipping Name

FORM-A
HAZARDOUS WASTE

Federal law prohibits improper disposal
IF found contact the nearest police or
pubic safety authority or the
U.S. Environmental Protection Agency

Generator Information
Name
Address
City State ZIP
EPA ID No. EPA Waste No .
Accumulation Manifest
Start Date Drum No.

THIS CONTAINER HOLDS HAZARDOUS OR TOXIC WASTE

HANDLE WITH CARE

Meeting the Pretransport Requirement

This is a good place to note that the word "label," in DOT parlance, has a highly specific meaning, involving graphic representation of hazard class. This meaning is detailed below. So while the device shown here may look like a label, its correct term, as DOT defines things, is *marking.*

United Nations/North America (UN/NA) Number Needed

All packages with a capacity of 110 gallons or less—such as 55 gallon drums of hazardous waste—must be marked with not only the proper shipping name of the hazardous waste, but also its United Nations/North America (UN/NA) number. Many wastes will have a specific number or a "class" number, however, there is a single UN/NA number—NA 9189— for the entire "Hazardous Waste, n.o.s." category. The preceding table gives the UN/NA numbers for many common wastes.

This End Up'

Other Regulated Materials (ORMs) may have additional marking requirements. The most important to the SQG is the requirement to clearly mark "THIS SIDE UP" or "THIS END UP" on a container holding liquid hazardous waste.

There are, as you might expect, a multitude of other specific marking requirements for packages, freight containers, and transport vehicles. Rarely, however, do they apply to the typical SQG.

Labels

Markings, as shown above, are placed on hazardous material/waste shipments to identify the contents of the cargo, container, or package and to provide general information about handling. *Labels, as defined by DOT, are graphic representations of the hazard associated with a particular material.* The labels are diamond-shaped and typically communicate the hazard of the package

with an illustration (e.g., chemical spilling), while the hazard class (e.g., corrosive) is written boldly in English across the label.

The hazardous materials table indicates which materials require labels. The responsibility for placing labels on packages rests with the generator.

ORM-E hazardous wastes are exempt from labeling requirements, but other waste classes sent off-site by SQGs will require labels. The label must be printed on or affixed near the marked shipping name.

Placards

The generator is also responsible for providing the transporter with appropriate *placards* which are placed on the ends and sides of motor vehicles, railcars, or freight containers, to quickly and

clearly communicate the hazard of the cargo to emergency responders—or to hazardous materials inspectors.

Placed on the outside of a vehicle, placards are identical to labels in that they are graphic representations of the hazard associated with a particular material. We're sure you've seen these familiar devices. In most cases, the transporter already carries the appropriate placards. The generator should, however, have the placards available *and should ensure that placards are displayed appropriately on the transport vehicle before it leaves the facility grounds.*

Reportable Quantities

Finally, if you're shipping a quantity of a waste that exceeds its reportable quantity, the threshold amount for a substance to be regulated (often 100 pounds), a reportable container label should be affixed to thecontainer or package and the weight of the material, in ranges, marked on the label.

DOT hazardous materials tables give the reportable quantity for most commonly shipped hazardous wastes.

The Hazardous Waste Manifest

The hazardous waste manifest is the key document in keeping a record of the hazardous waste you ship. It's intended to maintain a permanent "paper trail" that shows the nature and quantity of the waste, where it goes, and how it is disposed.

By law, every time you ship any amount of hazardous waste, *(with one key exception involving reclamation, explained below), you* are required to complete a manifest. What's more, no legitimate hazardous waste transporter will accept your shipment without one!

This section includes step-by-step instructions on how to fill out a hazardous waste manifest correctly. But first, it's important to understand what a manifest is, what it does, and why it's so important.

Federal Regulations and the Manifest

In 1980, the federal government began to require manifests for all hazardous waste shipments. This requirement was in keeping with the government's "cradle-to-grave" system of tracking hazardous waste, which makes it possible to track all waste from the point of generation to its ultimate disposition.

The EPA developed the Uniform Hazardous Waste Manifest form to make it as simple as possible to record the required information and track the waste. *(Some states, however, have more-detailed requirements than those that are included on the federal form..)*

Your Never-Ending Liability

The manifest is especially important, as it enables you to keep track of the waste you generate and to make sure it reaches its intended destination. *Remember, your liability does not end just because a shipper takes a quantity of waste off your premises.* By law, you can be held responsible if the waste is mismanaged by a transporter or a treatment, storage, or disposal

facility (TSDF). If a company "twice removed" from you illegally deposits your waste in a landfill site, without your knowledge, you may be held responsible for cleaning up that site years later.

State Requirements Vary

As mentioned above, some states require more detailed information about hazardous waste shipments than the federal government does. Some states require:

- A state manifest document number;
- State-issued identification numbers for the generator, transporter, and receiving facility;
- Telephone numbers for transporters and receiving facilities;

· State or EPA waste identification numbers;

· Specific information about the nature of the wastes being shipped; and

· Special handling codes that indicate how to handle, treat, and dispose of the waste.

It is also important to know that, when out-of-state destinations are involved, there are both "right" and "wrong" manifests to use. While your hazardous waste hauler will hopefully provide you with or help you obtain the correct manifest, here's how the hierarchy works:

1. Generally, use the manifest of the state to which the waste will be *finally disposed;*

2. If the final-destination state does not have its own manifest, use your own state's manifest form;

3. If neither state has developed a manifest, use the Uniform Manifest.

For example, if your hazardous wastes are destined for a facility in Connecticut, you must use a Connecticut manifest, because that state has its own manifest. However, if your facility is located in Minnesota, and your wastes are sent to a recycling facility in South Dakota, you would use Minnesota's manifest because South Dakota does not have its own. However, if your facility is in

North Dakota and you are sending your wastes to South Dakota, you would use the Uniform Manifest because neither state has developed a manifest form.

What Happens to the Manifest

The manifest is used when a generator offers hazardous waste for shipment. The generator offers a sheaf of copies to the transporter when the shipment is accepted, keeping a copy. The rest of the copies go to hazardous waste agencies, other transporters, if any, and the receiving facility.

The entire process is designed so that the waste can be tracked as closely as possible by following it through every party that takes temporary possession.

An essential part of the tracking process occurs when the receiving facility returns a copy of the manifest to the original generator. You should receive this copy within a month or so after the shipment is accepted for transport. It should bear the signature of the operator of the facility.

If you fail to receive a copy of the manifest within 60 days, you must notify the EPA or appropriate state environmental agency of the problem and supply them with a copy of the signed and dated manifest. The agency may then proceed to investigate the whereabouts and disposition of the waste.

Remember, you can still be held liable if your hazardous waste is mismanaged by others, but your correct action in a problem situation will likely weigh in your favor in any ultimate judgment.

Note that, by law, you must keep copies of the manifest on file and available for inspection for a minimum of *three years.* Given the unlimited liability generators bear for mismanaged waste shipments, many firms **never** throw these valuable documents away!

Exception to the Manifest Requirement

SQGs are exempted from having to use a manifest if their waste shipments are reclaimed, under a written agreement, by the original provider of the materials comprising the waste. The agreement must specify the type and frequency of waste shipments. A second condition is that the vehicle(s) the reclaimer uses to transport the waste and then redeliver the regenerated material to the generator must be owned by the reclaimer.

To utilize this exemption, keep the agreement with the reclaimer on file for three years, in lieu of manifest documents.

Completing a Manifest

To guide you step-by-step through the manifest process, we've reproduced a copy of the federal government's Uniform Hazardous Waste Manifest in this section.

At first, this document may look complicated, and the task of completing it may appear to be tedious and time-consuming. In fact, completing it is relatively easy once you've done it a few times. The important concern is to be *complete* and *accurate;* as the EPA or state environmental agency eventually receives copies of every manifest you complete.

· For most generators (those shipping no more than four types of waste and using no more than two transporters), there are only 16 spaces to complete (plus spaces for information that may be required by the state government).

Spaces 17 through 20 are for transporters and the receiving facility to complete. The guide below will walk you through the first 16 questions, and then will describe the other information that needs to be shown.

Doing it by the Numbers

The first thing to notice is the shaded area. This is reserved for special information that your state may require. Remember to check with your state's hazardous waste agency for specific information about these requirements.

Now, let's look at the parts of the manifest required by federal regulation:

Question 1. Enter your EPA ID number, a 12-digit number that should fill the allotted space. If you're unsure about your number, check copies of previous manifests. In rare circumstances, the transporter may use its ID number in place of yours.

The Manifest Document Number in Question 1 is assigned by the generator, and often is already preprinted on the form.

Question 2. Enter the number of this page and the total number of pages in the form, including continuation sheets. If you're only using one page, then it would be "Page 1 of 1." Remember to enter this for every continuation sheet, if any. This information helps make sure that pages don't get lost.

Questions 3. Enter your firm's name, street address, and phone number. If your firm has more than one address, use the address where the firm will receive the return copy of the form.

Questions 5 and 6. Enter the name of your hazardous waste transporter (for example, Safety-Kleen) and its EPA ID number. Every licensed transporter has one.

Questions 7 and 8. If a second transporter will be used, enter its company name and EPA ID number here. A second transporter would be used when the waste is first hauled to a temporary storage facility for later shipment to its ultimate disposal site by another transporter.

Questions 9 and 10. Enter the company name, street address, and EPA ID number of the facility that will receive the waste listed on the Manifest. Your transporter can probably supply this information to you, but remember that it's your responsibility to know and keep records of where the waste is treated and disposed of.

Question 11. Here's where the questions become a little more difficult. To complete this section, you need to supply for each waste the following:

· U.S. DOT shipping name

· Hazard Class

· United Nations/North America (UN/NA) ID number.

Question 11 has spaces for four separate wastes. If you're shipping more than four different kinds, then you'll need to use continuation sheets.

Question 12. For each waste shown in Question 11, enter the number and type of container. Use the appropriate abbreviation for the type of container from the table below:

BA = Bags mace of burlap,DF= Drums, barrels, kegs
cloth, paper, or plasticmade of fiberboard or plastic

CF = Cartons, cases, boxes DM= Drums, barrels, kegs
(including roll-offs) made of metal made of fiber or plastic
DW= Drums, barrels, kegsCM = Cartons, cases, boxes made of wood
made of metal
TP = Tanks, portable
CW= Cartons, cases, boxes made of wood
CY = Cylinders
TT = Cargo tanks (tank trucks)

Question 13. Enter the total quantity, the number of units of measure, for each waste shown in Question 11.

Question 14. For each waste shown in Question 11, enter the appropriate unit of measure. Use the table below to find the right abbreviation for units of measure:

G = Gallons (liquids only) L = Liters (liquids only)

P = Pounds K = Kilograms 1

T = Tons (2,000 pounds) M = Metric tons (1,000 kilograms)

Y = Cubic yards N = Cubic meters

Question 15. Use this space for shipments *within the United States* if there is any special information about transportation, treatment, storage, or disposal, or specific information about the bill of lading.

If the shipment is going *outside* the United States, you must enter the city and state of departure for a foreign country (that is, the last place the waste is located in the U.S. before it is shipped out of the country).

Question 16. You must read, sign (by hand), and date the Generator's Certification, and type or print your name as well. If the waste is not being shipped by highway, cross out the word "highway" in the Certification and write the correct mode of transportation (e.g., rail, air, water). If more than one mode of transportation will be used, write in the additional information. If you're

shipping to a facility outside the U.S., you must also add the following words to the Certification: *"and conforms to the terms of the EPA Acknowledgment of Consent to the shipment."*

Other Information

The first 16 questions really aren't that difficult—only Questions 11 through 14 get a little tricky, and you'll soon learn how to complete those quickly and accurately. But even though your task may end after Question 16, it's important to understand what information is supposed to go in the other spaces.

Questions 17 and 18. Each transporter must acknowledge receiving the waste by signing and dating the appropriate space. If a second transporter is involved, that firm will complete Question 18. If there are more than two transporters, then continuation sheets will be needed (see below).

Question 19. This space is for a representative of the receiving facility to note any discrepancies between the waste as described by you and the waste actually received at the facility. The operator of the receiving facility must note any such discrepancy—which shows why it's so important for you to answer Questions 11 through 14 accurately.

Question 20. The representative of the receiving facility should print or type his or her name, sign it by hand, and date the signature to acknowledge that the shipment was received.

Questions 21 through 23 apply to Form 8700-22A, which is the continuation sheet that must be used if there are more than two transporters or more than four different kinds of hazardous waste in your shipment. As with the first page of the Manifest, there are shaded spaces for state requirements that may apply.

Questions 21, 22, and 23. These are the same as Questions 1, 2, and 3 of the Manifest. Be sure they're completed, and that the page number is correct in Question 2.

Questions 24 through 27. These are for the names and ID numbers of additional transporters. For Question 24, you would write the number "3" in the blank space in "Transporter Company Name," because Transporters 1 and 2 were already listed on the first page of the Manifest.

Questions 28 through 32. These spaces correspond to Questions 11 through 15 of the first page of the Manifest, and apply to the types of waste you did not have room to list on the first page.

Questions 33 and 34. These spaces are to be completed by the transporters as with Questions 17 and 18 of the first page.

Question 35. This space will be completed by the receiving facility operator if any discrepancies are noted between your descriptions of the waste entered on this page and the condition in which the wastes are received.

How to Select a Hazardous Waste Transporter

Unless you choose to transport your hazardous waste yourself—a complex and usually expensive proposition, you'll need to find a qualified contractor to haul your waste to its final resting place.

There are several types of transporters and treatment, storage, and disposal facilities (TSDFs) from which you may choose:

· Transporters who pick up and haul wastes

· Transfer and storage facilities (also known as waste brokers) that collect wastes from several SQGs and combine them to make shipments large enough to take to disposal firms

· Treatment, storage, and disposal firms that ultimately dispose of the waste

· Firms that provide complete service, from pickup to disposal.

While the most important objective is to obtain the services of credible and certified firms, many SQGs prefer firms that provide full services. The reason is simple.

Complying with environmental regulations is not typically a full-time job at a smaller business. Those responsible for compliance need all the help they can get with respect to: the manifest, hazardous waste determinations and lab analysis, pickup scheduling, and waste minimization.

There's another reason small firms often prefer a full-service vendor. There's one less firm to audit.

Audit?

That's right. Before you send your hazardous wastes off-site, you need to *absolutely know* that the firm(s) transporting and disposing of your firm's wastes are credible and reliable. This chapter is a guide to the information you need to obtain about the Firms that you're thinking about hiring to manage your wastes off-site.

Audit Responsibility

The primary responsibility for conducting audits of these firms is the Corporate EH&S Department. An approved list of authorized firms will be maintained and distributed. If y0u have a firm that may be included on the list, contact EH&S and an audit will be scheduled.

The following information is a description of the audit process.

Why Audits Are Important

Before we address how to select a transporter and a disposal company, it's important for you to understand why it is so important that you choose the right firm. It's because *your liability as a generator does not end when the hazardous waste leaves your property.*

If a transporter or TSDF violates environmental laws and regulations, the EPA can hold you—the original generator of the waste—responsible for cleaning up the site. The entire site—despite the

fact that you fully complied with the law! In more than a few cases, small firms have been bankrupted by this liability system.

This is why you absolutely *must* diligently evaluate your contractors before a poor selection causes you major financial woes. At a minimum, you need answers to such questions as:

Has the firm secured all proper federal and state environmental permits?

· Is the firm in compliance with all of its permits?

· Is the company financially stable and properly insured?

· What past, current, or pending lawsuits or complaints, if any, have been filed against the firm?

· What types of treatment, disposal, and storage methods are used? (For example, dry cleaners would be interested in a firm's ability to recycle or incinerate F002 or D001 wastes.)

To make a wise selection, even the *smallest SQGs* need additional information about a waste handler's recordkeeping, standard operating procedures, value-added services, etc.

For example, will a transporter or TSDF be willing to give you the detailed information you need? Yes, he will—if he's the type of contractor who is knowledgeable, reliable and in compliance with the law.

If your prospective waste handler does object, or can't answer your questions, then chances are he also can't provide the safe and reliable services that you need and have a right to demand.

What if you already have a contract with a company that appears to be providing satisfactory service? Should you still perform a thorough audit? Again, the safest answer is "Yes." A reliable contractor should not object to providing the information, especially to an existing client.

Beginning the Audit

When beginning an audit of a hazardous waste contractor, you should quickly establish why the audit is required and what kind of information will be expected. The initial discussion should be held in the spirit of cooperation and might begin something like this:

"I know you understand what could happen to both of us if anything were to go wrong while you're handling our hazardous wastes. Because the stakes are so high, I'm required by my company to conduct an audit of your business, including the financial condition of your company. I need you to answer my questions, and want to assure you that the information you provide will be held in the strictest confidence. I also want you to understand that my company requires this information of any contractor considered to handle our hazardous wastes."

To make the process as smooth and efficient as possible, some firms develop a questionnaire (see end of section for a sample) for the contractor. If you and the contractor both understand what will be required from the very beginning, then the audit should proceed smoothly.

Getting Information Quickly and Easily

Even though audits should be as detailed as possible, most SQGs simply can't afford the time and money it takes to conduct exhaustive investigations. If time and money are a problem, then your

goal should be to collect as much information as possible as easily as you can, so long as you know that the information is reliable.

Federal, state, and local governmental agencies that regulate hazardous waste are usually excellent sources of reliable information. They know who their area hazardous waste contractors are, and how well they comply with regulations and permits.

Don't hesitate to contact the local offices of these agencies and ask for their help. Tell them that you're trying to make sure that your hazardous waste transporter or TSDF is fully qualified to do the job, and ask for any information they can provide, on or "off the record," on the companies you're auditing.

Other good sources of "reference" material are trade associations, professional organizations, or other businesses that generate similar wastes. If you have selected a firm to evaluate, they should provide you with reference firms similar to yours whom they service. Give these references a call.

Auditing Transporters

The lead federal agency in regulating hazardous waste transporters is the Department of Transportation. DOT has announced that it will audit all transporters, and give each of these firms ratings of Satisfactory, Conditional, and Unsatisfactory. (A "Conditional" rating will mean that the transporter needs to improve certain operations, but these problems are not serious enough to shut the firm down.)

You may not want to deal with any transporters who receive "Conditional" or "Unsatisfactory" ratings. But it's **important to remember that not all transporters rated "Satisfactory" will**

necessarily be right for you. Your specific wastes, their scope of services, and geographic location are all important factors in choosing a transporter.

What You Need to Know

Sample audit forms for hazardous waste transporters and TSDFs are included at the end of this chapter, along with rating forms you can use to tell whether or not the contractor will do a good job. (If the transporter and the TSDF are part of the same company, then much of the information can be repeated on both forms.)

Site Condition (TSDF's Only)

When auditing a TSDF, you should, if at all possible, personally visit the site of the company's hazardous waste operations. For many SQGs, wastes will be transported to a "transfer" station and then to a solvent recycler, incinerator, or landfill. If the ultimate disposal facility is in another

state, it may be impractical to visit this site. In this situation, be sure to visit the transfer facility and submit a questionnaire to the ultimate disposal facility.

At the site, first take a look to see if significant hazards or risks are apparent. Note the condition of buildings, piping systems, storage tanks, etc. Do any of these facilities appear to present

hazards? Determine the types of wastes normally handled and sorted by the facility on-site. How does this information compare with the activities allowed by the company's permits?

Note also what surrounds the site. Is it near bodies of water—where improperly handled waste can cause widespread contamination? What other businesses or other development could be impacted by an accident or incident? These are factors to consider.

When auditing a hazardous waste transporter, the condition of the vehicles is an indicator of the company's professionalism. Ask to see maintenance records to determine if they've been serviced on a regular schedule. Note if the vehicles are parked in a secure place when off the road;

determine how frequently vehicles are cleaned and whether cleaning complies with regulations governing disposal of waste residues.

Review the company's driver-training program, since hazardous waste transporters are required by law to provide very specific training to their drivers. Drivers should be familiar with regulations governing the transportation of hazardous materials, and be trained in emergency response procedures.

Make sure that proper emergency equipment is kept on the vehicles. This should include a spill boom, spill pads, neutralization materials, personal protective equipment, communication equipment, hazardous materials guidebooks, warning signs or devices, first-aid kits, and fire extinguishers.

Ask for a description of the company's safety program, and an accident history of the company, including both vehicle accidents and those relating to workplace safety. Find out if any corrective measures have been taken to reduce accidents.

Check to see that waste containers are in good condition and are properly labeled, and that the vehicles themselves bear placards that show what kind of hazardous materials are being transported.

At the TSDF, inquire about emergency procedures. If your container leaks, what steps are followed, what agencies are notified? Ask to see the company's first-aid and medical resources, and request inspection of the written emergency plan.

As a final observation, form an impression of the overall working atmosphere. If employees are friendly and professional in their manner and appearance, this usually indicates good management.

Financial Condition

Obtaining accurate financial information about the transporter or TSDF is very important. A company that is in poor financial condition may be tempted to save money by cutting corners in complying with environmental regulations. Review the financial strength of the company by

evaluating the firm's financial statements and/or Dun & Bradstreet (D & B) reports. These should be available from the company or they may be obtained through your local library.

Ask for copies of insurance certificates as proof of adequate coverage for the types of work the contractor does. Make sure that the policies are current, and that coverage complies with governmental requirements.

The company should be willing to tell you about any complaints or lawsuits that may have been filed against it in the past, or that are currently pending.

Evaluating the Contractor

If you have obtained as much information as possible about the contractor and recorded it on the audit form, you are now ready to evaluate the transporter or TSDF.

We have devised a rating system to assist you in evaluating firms. In this rating system, four points are assigned for each "Good" rating, two points are assigned for each "Fair" rating, and no points are given for "Poor" ratings or categories for which no information has been provided. An overall score of less than 90, or any category that receives a "Poor" rating, is a strong signal that potential problems may exist within a company.

Recordkeeping and Reporting Requirements

Good records are a must for meeting hazardous waste management requirements It's really no different than the fundamental rule governing you and the Internal Revenue Service; you must be able to demonstrate to the government that you complied with the law. A wise rule of thumb is the following:

Keep all records, reports, documentation, letters to you, and letters from you with respect to environmental compliance for a minimum of three years.
More specifically, SQGs must keep the following three types of RCRA records for at least three years:

1. **Manifests and signed copies from designated facilities.**
Be sure to also retain any reclamation contractual agreements for at least three years after the termination or expiration of the agreement. As we've said earlier, with the unlimited liability

generators live under for hazardous waste incidents, it's advisable to keep these records indefinitely.

2. **Exception reports .**
You are required to retain copies of "exception reports" sent to the EPA or a state environmental agency in the event that you did not receive a return copy of the manifest from the designated facility within 60 days. Never trust the EPA or state agency to keep track of your correspondence. It's your responsibility to keep accurate records.

3. **Test results**

Keep track of any laboratory results, including the type of sample, testing method, testing results, name and address of the testing lab, and the date of analysis. Additionally, file any compliance guidance materials—such as magazine articles, notes from EPA hotline conversations, EPA guidance manuals—used to make a hazardous waste determination. These supporting documents will not absolve you of guilt if you violate the law, but they should demonstrate that your violation was unintentional and that you made a good-faith effort to properly classify your wastes.

Additional reports may have to be filed under RCRA, depending on your business and activities at that business. If you own or operate an underground storage tank, you must retain records of notification and, if applicable, release reports, Corrective action, or closure plans.

In the future—if you do not already do so—you will also be required to keep records of: (1) release detection performance, (2) corrosion protection, (3) upgrades or repairs, and (4) closure.

Any reports of accidental releases of hazardous waste that were filed with the EPA or state should be kept on record for at least three years. And records of recycling activities, while not required, should be retained in order to demonstrate compliance with the law.

SQGs that store hazardous waste for longer than 270 days, treat hazardous wastes, or who operate a hazardous waste tank must keep more extensive records.

Track State Requirements

SQGs are exempt from the federal requirement to submit biennial reports. These reports—due every two years from generators of larger amounts of hazardous waste—provide the EPA with information about the amounts and types of wastes generated in this country and the manner in which these wastes are disposed.

SQGs in certain states, however, may be required to submit the same type of information to the state agency in an ***annual*** waste-generator report. The data for the report can easily be gleaned from copies of manifests, although information on waste reduction and minimization efforts, if required, may involve some additional thinking or documentation. Once again, see the state section of this book and/or obtain a copy of the state SQG regulations, or call your state environmental agency to determine if you should submit an annual report.

Some Helpful Hints

Keeping track of RCRA compliance should not be a considerable burden. Any successful business maintains an accurate record of transactions, letters, bills and correspondence. RCRA recordkeeping is just one more file.

However, the manifest, exception reporting, and test results files may be much smaller than comparable files you must keep for the Hazard Communication Standard (also known as the Right to Know law) or the Emergency Planning and Community Right to Know Act (commonly called SARA Title III).

To assist you in setting up an appropriate system for your smaller business, we have identified *possible* topic headings for file folders that are applicable to vehicle maintenance shops,

dry-cleaners, and light industry/small manufacturers. Choose only those files that are important to your business and compliance needs.

Correspondence with Environmental, Safety, and Health Agencies

- State hazardous waste management agency
- EPA

· OSHA

· Other state environmental agencies

· Other state employee safety agencies or boards.

Resource Conservation and Recovery Act

· Manifests and contractual reclamation agreements

· Exception reports

· Testing results

· Copy of an emergency or "Contingency Plan"

· Spill or release reports

· Underground storage tank compliance records

· Audits

· Agency inspections.

Other Key RCRA Records to File

· Records of on-site recycling activities, to document: (1) the amount of material, at the beginning of the year, (2) the amount purchased over the year, and (3) the amount remaining at the end of the year.

· Records of used-battery accumulation and recycling activities (you should be able to show that you recycled 75 percent of these materials in a calendar year)

· Records of used-oil accumulation and recycling activities

· Training documentation, if you conducted (formal or informal) employee hazardous waste training.

Occupational Safety and Health Act

· Accident reports

· Material safety data sheets

· Training documentation for Hazard Communication Standard

· Hazard Communication Plan.

Emergency Planning and Community Right to Know Act

· Emergency planning reporting (e.g., letter notifying the state that you have present one of the listed "extremely hazardous substances" in excess of its prescribed thresholds and any correspondence with the Local Emergency Planning Committee (LEPC)

· Spill or release notification reports (can be combined)
· Chemical inventory reporting
· Toxic chemical release reporting.

Clean Air or Clean Water Act

· Folder for each specific permit requirement (e.g., NPDES, pretreatment, NSPS, NESHAP).

City or State Environmental Laws

· Any additional requirements.

A few last thoughts on recordkeeping:

Common Sense

First, plan on retaining records for more than three years. It never hurts to have these records, and it may cost you dearly if you discard files and later discover that, for example, the town accuses you of, years ago, illegally disposing of hazardous wastes in the town dump.

Second, if you use a word processor, be sure to keep both a computer file and a "hard-copy" record of your correspondence.

Third, it may be helpful to photocopy correspondence with governmental agencies and to place one copy in the appropriate agency file (e.g., EPA) and the other copy in the appropriate "topic" file (e.g., manifests).

Fourth, an effective filing system will impress any inspector! Its converse: madly scurrying around an office to find an exception report or manifest will not! In even the smallest of offices, be sure that *someone*— yourself, a secretary, the environmental coordinator—is in charge of keeping the records.

Section7

Facility Waste Inventory

INSTRUCTIONS

General	This form is used to keep a listing of all the wastes generated at a facility. The name of the facility should be filled in at the top of the page.
Number	Use any numbering system you prefer. These numbers are not referenced anywhere else in the WMP.
Waste Name	If the waste name is listed in Section 5, use that name. If not, use a suitable name. The next update distribution will include the name in the table in Section 5.
Quantify / Frequency	This is an estimate of the amount of waste generated and the period of time it is generated in. For example, 1000 lbs per week or 4000 lbs once a year. The number should be revised when better estimates are available. Every effort should be made to keep these numbers in pounds to enable totals to be calculated for WPC.
Process	Give a brief description of how the waste is generated. Sometimes the way a waste is generated or the process producing the waste may effect the way the waste is classified

Name of Excel file containing form: Inventry.xls

Section 8

Facility Waste Management Summary

INSTRUCTIONS

General	This form is used to record how each waste is being managed. The name of the facility should be filled in at the top of the page.
Waste Name	If the waste name is listed in Section 5, use that name. If not, use a suitable name. The next update distribution will include the name in the table in Section 5.
Waste Classification	This space should be used to record the waste classification as indicated on the Waste Identification Sheets. If no Identification Sheet is available, contact the ES&H Coordinator of Corporate EH&S for help in getting the proper classification.
Responsible Person	This person will typically be the person generating the waste. For example, the maintenance supervisor may be responsible for shop waste, the operations supervisor for amine waste, etc.
Management Method	List how the waste is managed; landfill, recycled, disposal well, treated etc
TSDF Name, etc.	List the name and address of the treatment, storage, or disposal facility. Be sure to list the contact name and phone number.
Transporter Name, etc.	List the name and address of the transportation company. Be sure to list the contact name and phone number.

Name of Excel file containing form: Summary.xls

Section 9

Facility Shipment and Disposal Log

INSTRUCTIONS

General

This form will serve two purposes: (Fill in Facility name at the top).

1. This form is used to record waste that is treated or disposed of onsite or shipped offsite for treatment, storage or disposal. Each load or batch should be recorded. Wastes which are produced and disposed of continually should be recorded periodically but at least once a month.
2. This same format should be used to report waste activity to EH&S. The only difference will be that totals for each waste with the same management method will be listed. For example , a facility disposes of 200 drums of oil filters each weighing 250 lbs during the month in four shipments. Half the drums are sent for recycling, and half to a landfill. The monthly report would have two lines (1 for recycling & 1 for Landfill) for the filters each showing 25,000 lbs.

Date

Date waste is disposed or shipped. on the monthly report just list the month the report covers.

Waste Name

If the waste name is listed on the Waste Inventory sheet, use that name. If not, use a suitable name. It is important to be consistent in using the same name for a given waste.

Management Method

List whether the waste was recycled, landfilled, deep well injected, etc.

Quantity Disposed

List the quantity recycled, disposed, etc. in pounds. If the quantity is easily available in gallons, gallons may be used to log individual shipments. However, the total gallons for the month must be converted to pounds for the monthly report

Total Cost

List the total costs associated with the shipment. Include transportation, treatment, disposal, profile fees, acceptance fees, analytical fees, and any other costs. Do not include amounts for work completed by Warren employees

Name of Excel file containing form: Shipment.xls

Section 10

Facility Waste Drum / Container Log Sheet

INSTRUCTIONS

General Drums or containers are often used to collect and store wastes. This form provides a way to track these drums and containers. Drums or containers filled and shipped immediately do not need to be listed here, although they can be if desired. This form is intended for those drums or containers stored onsite. Put facility name at top of form.

Number Any numbering system may be selected as long as each number is unique. The number should be marked on the drum. For example, 98-06 could be the number assigned to the 6th drum used to store waste during the year 1998

Description Provide a description of the container contents. Include a physical description, particularly noting if any free liquids are present. The description should include the waste name as listed on the facility inventory. If a drum is empty, list it as empty and describe what the drum last contained

Location Where is the drum being stored.

Date Stored Date the drum is stored.

Date Shipped List the date the drum is shipped or disposed.

Comments List any additional comments.

Name of Excel file containing form: Drums.xls

APPENDIX E

DISPOSAL COMPANY PERMITS

The New Mexico Environment Department

hereby issues this

SOLID WASTE FACILITY PERMIT

Facility Type: Municipal Landfill

Facility No. *SWM-130302*

Facility Name and Location:
Lea County Landfill
5 Miles East of Eunice, New Mexico

Owner's Name and Address:
Lea County Solid Waste Authority
P.O. Box 4C
Lovington, New Mexico 88260

This permit is issued pursuant to Section 74-9-20 of the Solid Waste Act and is subject to the conditions of the Order of the Secretary, dated *December 17,* 19*98*.

Given this 29th day of December, 1998

Peter Maggiore

Peter Maggiore
Secretary of Environment

Expiration date: *December 17, 2018*

STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT

IN THE MATTER OF THE APPLICATION OF
LEA COUNTY SOLID WASTE AUTHORITY
FOR A SOLID WASTE FACILITY PERMIT
FOR THE LEA COUNTY LANDFILL

No. SW 98-08(P)

FINAL ORDER

This matter comes before the Secretary of Environment ("Secretary"), following a hearing before the Hearing Officer on October 29, 1998, in Eunice, New Mexico. Applicant Lea County Solid Waste Authority ("LCSWA") is seeking a Solid Waste Facility Permit ("Permit") for the construction, operation, and closure of the Lea County Landfill ("Landfill"). In addition, LCSWA seeks approval for a suspension of ground water monitoring, and proposes a system of vadose zone monitoring in lieu thereof. The New Mexico Environment Department ("NMED"), through its Solid Waste Bureau, supports issuance of the Permit and suspension of ground water monitoring subject to certain conditions, to which LCSWA does not object.

The Secretary having considered the record herein, including the parties' Proposed Findings of Fact and Conclusions of Law, the Hearing Officer's Report, and the parties' responses to the Hearing Officer's Report; and the Secretary being fully advised regarding this matter;

THE SECRETARY HEREBY ADOPTS THE HEARING OFFICER'S RECOMMENDED FINDINGS OF FACT.

THE SECRETARY HEREBY ADOPTS THE HEARING OFFICER'S RECOMMENDED CONCLUSIONS OF LAW.

IT IS THEREFORE ORDERED:

1. LCSWA's Application is granted, and a Permit is issued for a twenty-year period, subject to the following conditions.

a. LCSWA shall comply with all applicable requirements of 20 NMAC 9.1, Solid Waste Management (Nov. 30, 1995), the Solid Waste Act, NMSA §§ 74-9-1 to 74-9-42 (1990-95), and any other conditions set forth herein, and shall construct and operate the Landfill in accordance with the Application. This condition is to remind LCSWA that all applicable requirements must be complied with throughout the life of the Landfill.

b. At least 30 days prior to the start of construction in the proposed disposal area, LCSWA shall furnish NMED's Solid Waste Bureau with a major milestone schedule in order for NMED to effectively monitor construction of the landfill.

c. Quality assurance/quality control plans shall be submitted to and approved by NMED prior to construction of the liner, leachate collection system, and final cover.

d. All records regarding special waste, including treated formerly characteristic hazardous waste, shall be kept on-site and furnished to NMED. The records shall include chemical analyses and detailed descriptions of generators' and treaters' knowledge of specific special wastes. This is to ensure only non-hazardous waste is disposed of in the Landfill.

2. LCSWA's request for suspension of ground water monitoring is approved, subject to the following conditions:

a. LCSWA shall submit vadose zone monitoring laboratory analytical results to NMED within 14 days of LCSWA's receipt of such results.

b. If there is any evidence of unacceptable risk to human health or the environment, the suspension may be revoked by the Secretary as warranted.

3. Nothing in this Final Order shall be deemed to relieve LCSWA from the obligation to comply with all other applicable federal, state, and local laws and regulations.

Peter Maggiore 12/17/98

PETER MAGGIORE
Secretary of Environment

NOTICE OF APPEAL PROCEDURE

Pursuant to NMSA 1978, § 74-9-30.A (1990), any person adversely affected by the foregoing Final Order may appeal to the Court of Appeals by following the procedure set forth in that statute.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Final Order was served on the following counsel of record, by telefax, on December 17, 1998:

Gayle Garner
General Counsel
Camino Real Environmental Center, Inc.
5309 El Paso Drive
El Paso, TX 79905
FAX: 915-778-8359

and that a copy thereof was hand-delivered on the same date to the following counsel of record:

Ana Marie Ortiz
Assistant General Counsel
NMED Office of General Counsel
1190 St. Francis Drive
Santa Fe, NM 87502

IDALEE SISNEROS, Hearing Clerk

5053470435

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

January 17, 2006

Mr. Bill Marley
Gandy Marley, Inc.
P.O. Box 1658
Roswell, NM 88202

RE: New Mexico Oil Conservation Division Permit No. NM-01-0019
For the Commercial Surface Waste Management Facility Located in
Sections 4, 5, 8, and 9 of Township 11 South, Range 31 East, NMPM,
Chaves County, New Mexico

Dear Mr. Marley:

The permit modification application, dated October 4, 2005, for the facility shown above, is hereby approved in accordance with New Mexico Oil Conservation Division (NMOCD) Rule 711 and under the conditions contained in the enclosed attachment. This permit approval is conditional upon the receipt and approval by the NMOCD of financial assurance in the amount of $102,917. Gandy Marley currently has financial assurance in place in the amount of $82,917. The additional $20,000 is to be received according to the schedule outlined in the financial assurance section of the enclosed attachment. The permit modification application consists of the permit application Form C-137 dated October 4, 2005 and all attachments (#5 through #13) thereto.

The operation, monitoring and reporting shall be as specified in the attached conditions. All modifications and alternatives to the approved conditions must receive NMOCD approval. Gandy Marley is required to notify the NMOCD of any facility expansion or process modification.

Be advised that approval of this permit modification does not relieve Gandy Marley of liability should its operations at this site result in pollution of surface water, groundwater, or the environment. Nor does it relieve Gandy Marley of responsibility for compliance with other federal, state, or local rules and regulations.

NMOCD Rule 310 prohibits oil from being stored in earthen reservoirs or open receptacles.

The facility is subject to periodic inspection by the NMOCD. The conditions of the permit will be reviewed by the NMOCD no less than once every five years. Closure cost estimates included in your permit modification application will be reviewed by the NMOCD periodically and may be adjusted as needed.

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Enclosed are two copies of the conditions of approval. Please sign and return one copy to the NMOCD Santa Fe office within five working days of receipt of this letter.

If you have any questions, contact Ed Martin at (505) 476-3492 or ed.martin@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

Roger C. Anderson
Environmental Bureau Chief

Copy: NMOCD, Hobbs, New Mexico

PERMIT CONDITIONS
NMOCD PERMIT NO. NM-01-0019
GANDY MARLEY, INC. SURFACE WASTE MANAGEMENT FACILITY
Located in Sections 4, 5, 8, and 9 of Township 11 South, Range 31 East, NMPM
Chaves County, New Mexico
January 12, 2006

GENERAL FACILITY OPERATIONS

1. The facility must be fenced and have a sign at the entrance that is legible from 50 feet and contain the name, location by section, township, range, and emergency telephone number(s) for the facility.
2. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.
3. There may be no ponding, pooling or run-off of water allowed. Ponding of precipitation shall be removed within 24 hours of discovery.
4. All aboveground tanks at the facility, and containing materials other than fresh water, shall be placed on an impermeable pad. The tanks shall be labeled as to contents and hazards and must be bermed to contain one and one-third (133%) of the volume of the largest tank or all interconnected tanks.
5. The NMOCD Santa Fe and Hobbs offices must be notified within 24 hours of discovery of a spill or leak.
6. All tanks exceeding 16 feet in diameter and all exposed pits, ponds or lagoons must be screened, netted, covered, or otherwise rendered non-hazardous to migratory birds.

LANDFARM OPERATION

1. All contaminated soils received at the landfarm must be spread and disked within 72 hours of receipt.
2. Soils must be spread on the surface in lifts of six inches or less.
3. Soils must be disked bi-weekly, or more often, to enhance biodegradation of contaminants.
4. Moisture may be added to enhance bioremediation and to control blowing dust.
5. The active landfarm cells must be bermed to prevent run-on and run-off. A perimeter berm capable of containing precipitation from a one hundred year flood for the region shall be maintained.
6. Contaminated soils shall not be placed within 100 feet of the boundary of the facility.
7. Contaminated soils shall not be placed within 20 feet of any pipelines crossing the landfarm. No equipment may be operated within 10 feet of any such pipeline. All pipelines crossing the facility must have surface markers identifying the location.
8. Successive lifts of contaminated soils may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 2,500 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations shall be maintained at the facility. The application of successive lifts, and the removal of remediated soils require NMOCD approval.

9. The application of microbes or fertilizers to enhance bioremediation requires NMOCD approval. Such requests for approval shall include the location of the area designated for the application, the composition of the additives, and the method of application.
10. Any design changes to the landfarm and tank bottom holding and treatment area must be submitted to the NMOCD Santa Fe office for approval.
11. Landfarm inspection and maintenance shall be conducted at least bi-weekly and immediately following any consequential rain or windstorm. The NMOCD Santa Fe office must be notified within 48 hours of the discovery of any defect during these inspections. Repairs of such defects shall be made as soon as possible. If such defect will jeopardize the integrity of the landfarm, additional wastes shall not be placed into that portion of the landfarm until repairs have been completed.
12. Landfarm cells shall not exceed 5 acres in area.
13. A treatment zone not to exceed three feet beneath the landfarm native ground surface will be monitored. A minimum of one random soil sample shall be taken from each cell six months after the first contaminated soils are placed in the cell and then quarterly thereafter.
14. Such soil samples shall be analyzed using EPA-approved methods for TPH and BTEX quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually.
15. After the soil samples are obtained, the boreholes shall be filled with an impermeable material such as cement or bentonite.
16. All loads of tank bottoms shall be screened for hydrogen sulfide (H_2S) before they are unloaded from the truck. Records of H_2S screening shall be maintained for NMOCD review.
17. Tank bottoms must be placed in the receiving tank for settling prior to solidification and landfarm application.
18. The concrete mixing impoundment may be used for the solidification of tank bottoms. Adequate freeboard shall be maintained to prevent any overtopping or slop over of material. Soils, remediated to NMOCD standards, may be mixed with the tank bottoms to stabilize the material. Material received at this impoundment must be mixed and stabilized immediately.
19. The concrete mixing impoundment shall be inspected bi-weekly, or more often, to assess its overall integrity. Records of such inspections shall be made available for NMOCD inspection.
20. Loads of tank bottoms that contain miscellaneous hydrocarbons in excess of 2/10 of 1% of the total volume of the tank bottoms must be accompanied by and NMOCD-approved Form C-117-A from the well operator. Accumulations of miscellaneous hydrocarbons must be reported on NMOCD Form C-118.

LANDFILL OPERATION

1. Landfill cells shall be constructed according to the facility design and construction (attachment 7) portion of the permit modification application dated October 4, 2005
2. No debris will be placed in a landfill cell in a way that would compromise the integrity of the clay liner. Large debris with such a potential will be placed on a soil layer sufficient to protect the liner.
3. As the cell fills, the contaminated material will be covered, progressively, with a 1-foot thick clay cap, which will be machine compacted and a minimum of 2 feet of clean soil.
4. Non-virgin soils used a cover material will be sampled and analyzed for TPH, BTEX and chlorides. A report of such sampling and analyses results shall be submitted to the NMOCD prior to using such soil as landfill cover.

5. The top of the clean soil cover will be seeded with indigenous plants and watered to promote plant growth.
6. No materials will be placed in the landfill that are chemically incompatible with each other.
7. Any precipitation that accumulates in the landfill cell will be removed within 72 hours of discovery. Upon removal, such accumulated water will be sampled for TPH, BTEX and chlorides. Records of such sampling and analyses results shall be maintained for NMOCD inspection.
8. No more than 10 uncovered acres will be used for landfill disposal at any given time.
9. The leachate collection system will be monitored as described in Attachment 7 of the permit modification proposal dated October 4, 2005.
10. Landfarmed petroleum-contaminated soils may be used as daily cover within the landfill when a laboratory measurement of TPH is less than or equal to 1,500 ppm, BTEX is less than or equal to 50 ppm, and benzene is less than or equal to 10 ppm. Records of the sampling and analyses results shall be maintained for NMOCD inspection.
11. Cover materials will be applied to the working face of the landfill, as necessary, to control odors, vectors, and blowing litter.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only:
   a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain naturally occurring radioactive material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403. A "Generator Certificate of Waste Status" signed by the generator shall accompany all loads of these wastes received at the facility.
   b. Non-hazardous, non-exempt oilfield wastes that do not contain NORM. All such wastes shall be accompanied by:
      (1) An approved NMOCD Form C-138 Request for Approval to Accept Solid Waste.
      (2) A "Generator Certificate of Waste Status" signed by the generator.
      (3) A verification of waste status issued by the appropriate agency for wastes generated outside NMOCD jurisdiction. The agency verification shall be based upon specific information on the subject waste that demonstrates the exempt or non-hazardous classification of the waste.
   c. Non-oilfield wastes that are non-hazardous if ordered by the Department of Public Safety in a public health emergency. NMOCD approval must be obtained prior to accepting such wastes.
2. The facility shall not accept wastes that are hazardous by either listing or characteristic testing.
3. The facility shall not accept free liquids or soils with free liquids.
4. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional material has been added.

REPORTING REQUIREMENTS

1. Results of the bi-weekly facility inspection and maintenance, including inspection of the concrete mixing impoundment, must be recorded and maintained for NMOCD review. The NMOCD Santa Fe office shall be notified within 48 hours if any defect is observed.

2. Results of the H_2S screening shall be recorded and maintained for NMOCD review.
3. Analyses results from the treatment zone monitoring shall be submitted to the NMOCD Santa Fe office within 30 days of receipt from the laboratory.
4. Analyses results for remediated soils shall be submitted to the NMOCD Santa Fe office along with any request to close a landfarm cell, apply successive lifts or to remove any remediated material.
5. Gandy Marley shall comply with NMOCD Rule 116 as it applies to this facility.
6. Records of material disposed of at the facility shall be maintained at the facility. Such records, for each load of material, shall include:
   A. Generator of the waste
   B. Origin of the waste
   C. Date received
   D. Quantity
   E. Certification of waste status as exempt or non-exempt along with any supporting documentation to certify non-hazardous status for non-exempt waste
   F. NORM status declaration
   G. Name of transporter
   H. Exact cell location
   I. Addition of microbes, or fertilizers if applicable
7. The NMOCD shall be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.
8. All records shall be retained for a period of 5 years.

FINANCIAL ASSURANCE

1. The NMOCD currently has financial assurance from Gandy Marley in the amount of $82,917.
2. An additional $20,000 financial assurance is required due to the approval of this modification. This additional $20,000 is due as follows:
   A. No later than January 12, 2007, an additional $5,000 is required.
   B. No later than January 12, 2008, an additional $5,000 is required.
   C. No later than January 12, 2009, an additional $5,000 is required.
   D. No later than January 12, 2010, the final $5,000 is required.
3. As stated above, the facility is subject to periodic inspection by the NMOCD. The conditions of the permit covering this facility will be reviewed periodically, but no less often than every 5 years from the date of this approval. Closure cost estimates, as shown in Attachment 10 of the permit modification application dated October 4, 2005, will be reviewed as well, and financial assurance requirements contained in these conditions for approval may be adjusted by the NMOCD.

CLOSURE

Closure of the facility shall be accomplished according to Attachment 10 to the permit modification application dated October 4, 2005.

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CERTIFICATION

Gandy Marley, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Gandy Marley, Inc. further acknowledges that the Division for good cause shown as necessary to protect fresh water, human health, and the environment may change such terms and conditions administratively. The undersigned also attests to the fact that he or she understands 19.15.1.41 NMAC which states "Any person who conducts any activity pursuant to a permit, administrative order or other written authorization or approval from the division shall comply with every term, condition and provision of such permit, administrative order, authorization or approval."

Accepted:

GANDY MARLEY, INC.

Signature _____ Title V P Date 1/25/6

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 9, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 7099-3220-0000-5051-2221

Mr. Ken Marsh
Controlled Recovery, Inc.
P.O. Box 388
Hobbs, NM 88241-0388

RE: Controlled Recovery, Inc. Permit NM-01-0006
S/2 N/2 and the N/2 S/2 Section 27, Township 20 South, Range 32 East, NMPM
Lea County, New Mexico

Dear Mr. Marsh:

The New Mexico Oil Conservation Division (OCD) has determined that the following listed waste streams may be disposed of at Controlled Recovery, Inc. (CRI) pursuant to Permit NM-01-0006 without the necessity of prior written authorization of the Division:

(a) Barrels, drums, 5-gallon buckets, 1-gallon containers so long as empty and EPA-clean.
(b) Uncontaminated brush and vegetation arising from clearing operations.
(c) Uncontaminated concrete.
(d) Uncontaminated construction debris.
(e) Detergent buckets, so long as completely empty.
(f) Fiberglass tanks so long as the tank is empty, cut up or shredded, and EPA clean.
(g) Grease buckets, so long as empty and EPA clean.
(h) Uncontaminated ferrous sulfate or elemental sulfur so long as recovery and sale as a raw material is not possible.
(i) Metal plate and metal cable.
(j) Paper and paper bags, so long as empty (paper bags).
(k) Plastic pit liners, so long as cleaned well.
(l) Soiled rags or gloves. If wet, must pass Paint Filter Test prior to disposal.
(m) Uncontaminated wood pallets.

CRI OPERATIONAL CONDITIONS

Overall Facility Operation

1. The facility must be fenced and have a sign at each entrance. The sign must be legible from at least 50 feet and contain the following information: a) name of the facility; b) location by section, township, and range; c) emergency phone number; and d) OCD order number.

2. The facility will be maintained, contoured, and bermed to prevent runoff and runon of the portion of the facility containing contaminated solids and liquids.

3. All above ground tanks and fuel tanks will be bermed, the current berm height will be maintained, and the tanks will be labeled as to the contents with standard hazard labels.

4. Sumps and below grade tanks without leak detection systems shall have their integrity tested annually. Sumps and below grade tanks that can be removed from their emplacements may be tested by visual inspection. Other sumps and below grade tanks shall be tested by appropriate mechanical means.

5. Sumps and below grade tanks will be inspected weekly and fluid will be removed as necessary to prevent overflow. If any defects are noted, repairs must be made as soon as possible.

6. All saddle tanks and drums containing materials other than fresh water must be labeled as to contents with standard hazard labels.

7. A checklist of all inspections at CRI's facility will be kept and maintained for Division review.

8. The OCD shall be notified prior to the installation of any pipes or wells or other construction within the boundaries of the facility that are not associated with the operation of the facility.

9. Any major design changes to CRI's facility must be submitted to the Division's Santa Fe Office for approval.

Pond and Pit Operation

10. All produced water must be unloaded into tanks. The produced water must reside in the tank and skim pit system long enough to allow for oil separation. Oil recovered must be stored in aboveground storage tanks.

11. All pits and ponds that contain liquids must have sufficient freeboard to prevent

overtopping and a minimum freeboard of (1) one foot.

12. Free oil within the ponds and pits must be removed as soon as possible.

13. Ponds and pits will be inspected on a weekly basis and, if any defect is noted, repairs must be made as soon as possible.

14. A sign or other such marker with the pit/pond number must be clearly posted at each pit/pond location.

H2S Prevention & Contingency Plan

15. CRI personnel will wear H2S personnel monitors under circumstances in which H2S may be present, including the unloading of materials that may contain H2S. The monitors shall issue a visual and audible signal at 10 ppm of H2S in the ambient air that becomes more rapid at 20 ppm. An inspection for the presence of H2S shall be conducted weekly and reported on the inspection checklist.

16. In the event that a reading of 10 ppm is registered at CRI's facility, CRI personnel will evacuate the area and CRI will monitor H2S levels along the downwind boundary of the facility. If H2S levels reach 20 ppm, the facility will be closed and notification will be given to the following:

New Mexico State Police
Lea County Sheriff
The Division's Hobbs District Office

17. CRI will notify Callaway Safety in Hobbs to provide personnel, equipment, and supplies to mitigate the source of an H2S reading of 10 ppm or greater.

18. CRI will log and report to the Division all incidences where a reading 10 ppm H2S or greater is registered at CRI's facility.

Treating Plant Operations

19. The treating plant will be inspected weekly and if any defect is, noted repairs will be made as soon as possible. If the defect will jeopardize the integrity of the plant, the plant will be shut down until repairs have been completed.

20. The treating plant may use diesel and gasoline from storage tanks that are to be pulled, repaired, or replaced. This material may only be used in the treating plant as a product to aid in the chemical treatment and blending of crude oil.

21. CRI shall submit to the Division a functional diagram or engineering schematic that depicts the functioning of the treating plant as a whole, and each major

element thereof.

Solid Waste Disposal

22. CRI shall submit to the Division a general plan of operations for solid waste disposal areas 50 and 51 that will provide a written description of the ongoing excavation and closure operations. CRI will also submit an updated plat showing all current disposal cells and past burial operations.

23. Mechanical stabilization of liquids may be used prior to disposal.

24. Free liquids will not be disposed of in the solid waste disposal pits.

25. The solid waste disposal area will be inspected on a weekly basis and, if any defect is noted, repairs must be made as soon as possible.

26. The solid waste disposal area will be bermed to prevent runon and runoff of rain and storm water.

27. All trash accepted at the facility that has the potential for blowing away or being transported by other vectors must be covered with soil within 24 hours of disposal into the solid waste pit.

28. The Division will be notified before any new cells or expansion of existing cells in the solid waste disposal area are constructed.

APPENDIX F

SPILL NOTIFICATION FORM C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☐ Final Report

Name of Company	Contact
Address	Telephone No.
Facility Name	Facility Type

Surface Owner	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County

Latitude_____ **Longitude**_____

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name:	Approved by District Supervisor:	
Title:	Approval Date:	Expiration Date:
E-mail Address:	Conditions of Approval:	Attached ☐
Date: Phone:		

Attach Additional Sheets If Necessary

APPENDIX G

SPILL CONTINGENCY PLAN

Oil Spill Contingency Plan

Management Commitment of Manpower and Equipment

In addition to implementing the preventive measures described in this SPCC Plan, Targa (or the facility Plant Manager, if a manned facility) will also specifically:

- In the event of a discharge:
  - Make available all trained field personnel to perform response actions
  - Obtain assistance from additional full-time employees from contractors
  - Collaborate fully with local, state, and federal authorities on response and cleanup operations

- Maintain all communications equipment in operating condition at all times.

- Ensure that staging areas to be used in the event of a discharge to navigable waters are accessible by field vehicles.

- Review the adequacy of on-site and third-party response capacity with pre-established response/cleanup contractors, on a periodic basis, and update the response/cleanup contractor list in the SPCC plan as necessary.

- Maintain informal or formal agreements/contracts with response and cleanup contractors who will provide assistance in responding to an oil discharge and/or completing cleanup.

Authorized Facility Representative: _____

Title: _____

Signature: _____

1.0 INTRODUCTION

1.1 Purpose and Scope

This Oil Spill Contingency Plan is prepared in accordance with 40 CFR 112.7(d) to address oil releases where secondary containment is impracticable. Areas of impracticability at North Eunice Compressor Station are:

A. Separation Equipment;
B. Transfer piping; and,
C. Loading/Unloading Area (if secondary containment is not present).

This Contingency Plan defines the procedures and tactics for responding to discharges of oil from the noted operations (above) into navigable waters or adjoining shorelines of the United States.

This Contingency Plan is implemented whenever a discharge of oil has reached, or threatens, navigable waters or adjoining shorelines. Additionally, other substances used at the facility may have to be reported if a release of the substance is equal to, or greater than, the reportable quantity (RQ) for that substance. Reportable quantities according to 19.15.29.9 NMAC and 20.6.2.1203 NMAC are summarized in the following table:

Unauthorized Discharge Notification		
Volume	**Contact**	**Notification; Timeframe**
New Mexico Oil Conservation Division		
Major Release *19.15.29 NMAC*		
• Excess of 25 bbl, • Results in a fire, • Will reach a watercourse, • May reasonably endanger public health • Results in substantial damage to property or environment • Excess of 500 MCF or gas • Reasonable detrimental to water or quality standards	New Mexico Oil Conservation Division District Office (NMOCD – Hobbs for Eunice Gas Plant) 575-393-6161	Verbal information from Form C-141[(1)]; immediately (within 24 hours) upon discovery
Minor Release *19.15.29 NMAC*		
• Excess of 5 bbl (less than 25 bbl), • Excess of 50 MCF (less than 500 MCF)	New Mexico Oil Conservation Division District Office (NMOCD – Hobbs for Eunice Gas Plant) 1625 N. French Drive Hobbs, New Mexico 88240	Written and Form C-141[(1)]; timely (within 15 days) upon discovery

Unauthorized Discharge Notification		
Volume	**Contact**	**Notification; Timeframe**
New Mexico Environmental Department		
Discharge quantity which may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property. *20.6.2.1203 NMAC*		
No Minimum Quantity	New Mexico Environmental Department 505-827-9329	Verbal; immediately (within 24 hours) upon discovery

Other Discharge Notification Contact Information:

Contact List and Phone Numbers		
Internal Personnel (to be immediately notified by person discovering spill)		
Name	**Title**	**Telephone**
Gary Maricle	Area Manager	575-394-2534 ext. 226 (office) 575-602-6005 (cell)
Rebecca Woodell	Environmental Representative	575-394-2534 ext. 239 (office) 575-631-7085 (cell)
Outside Verbal Notification (Immediately by the Area Manager)		
Agency		**Telephone**
Lea County LEPC Notification Lea County Sheriff's Office (24-Hr) Lorenzo Velasquez (Emergency Coordinator)		 575-396-3611 575-396-8607
National Response Center		800-424-8802
Other Emergency Contacts (As Needed)		
Agency		**Telephone**
Ambulance, Police, Other		911
Lea Regional Medical Center 5419 N. Lovington Highway Hobbs, NM 88240		575-492-5000
Eunice Fire Department 1106 Avenue J, Eunice, NM 88231		575-394-2111 (Eunice Police Dept.)

This Contingency Plan generally follows the content and organization of 40 CFR 109 and describes the distribution of responsibilities and basic procedures for responding to an oil discharge and performing cleanup operations.

Utilizing Company resources and/or contracted resources, Targa Midstream Services LP ("Targa") is committed to provide for the manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Targa has spill reponse contractors which can be utilized to for spill response and clean-up. The names and phone numbers of those contractors are found in the following table:

Spill Response Contactor's for North Eunice Compressor Station		
Contractor	**Location**	**Phone Number**
B&H Maintenance & Construction	Eunice, New Mexico	575-394-2588
Basic Energy	Eunice, New Mexico	575-394-2545
Environmental Plus	Eunice, New Mexico	575-394-3481
Ferguson Construction Company	Lovington, New Mexico	575-396-3689
Flint Energy Services	Hobbs, New Mexico	575-391-8886
Gandy Corporation	Lovington, New Mexico	575-398-4960
Indian Fire & Safety, Inc.	Hobbs, New Mexico	575-393-3093
Key Energy Services	Eunice, New Mexico	575-394-2581
Larson & Associates, Inc.	Midland, Texas	432-687-0901
Southwest Safety Specialists	Hobbs, New Mexico	575-393-3072
Total Safety Equipment Company, Inc.	Hobbs, New Mexico	575-392-2973
Victory Services	Eunice, New Mexico	575-394-0219
Watson Construction	Hobbs, New Mexico	575-391-0537

1.2 Resources at Risk

The area surrounding South Eunice Compressor Station is generally flat surrounded by brush land. Storm water flows regionally to the southeast. Besides assets owned by Targa, resources at risk include property southeast of the facility. These resources have the potential of being affected during a spill.

Physical barriers surrounding the facility include natural topography. The most likely flow path for discharge from the facility is southeast.

Response equipment should be placed such as to protect resources surrounding the facility. The flow of a spill at the facility will most likely travel toward the southeast. **Figure C1** (Contingency Plan Map) at the end of this plan shows possible boom deployment zone(s) which most probably would minimize drainage from the facility to surrounding water bodies.

There are no churches, schools, public meeting locations or other public resources near the facility at risk. Targa will coordinate with the local Fire Department, Sheriff, Police, and with its residential neighbors, to provide the appropriate warnings in the event of a discharge that could affect public health and safety.

1.3 Risk Assessment

This facility is unmanned. Once a spill has been detected or observed, Targa can shut down the operations at the facility quickly and piping can be isolated via inline valves. According to

Targa, the most likely spill event would be a break in a transfer line and the maximum discharge of oil would be approximately 20-bbl per day.

1.4 Response Strategy

Targa personnel and contractors are equipped and trained to respond to certain "minor discharges" confined at the facility. Minor discharges can generally be described as those where the quantity of product discharged is small, the discharged material can be easily stopped and controlled, the discharge is localized, and the product is not likely to seep into groundwater or reach surface water or adjoining shorelines. Procedures for responding to minor discharges are covered in the SPCC Plan.

This Contingency Plan addresses all discharge incidents, including those that affect navigable waters or during which oil cannot be safely controlled by facility personnel. Response to such incidents will likely require the assistance of outside contractors to contain and clean-up the released oil. A list of spill responders is located in **Section 1.1** of this Spill Contingency Plan. The key response strategy will be to limit migration of spilled oil to minimize offsite impacts and impacts to surface waters.

2.0 SPILL DISCOVERY AND RESPONSE

2.1 Distribution of Responsibilities

Targa has the primary responsibility for providing for the initial response to oil discharge incidents originating from this facility. To accomplish this, Targa has designated the responsible facility person, indicated in General Facility Information section of the SPCC Plan, or their designate, as the qualified discharge Response Coordinator (RC).

The RC plays a central coordinating role in any emergency situation. The RC has the authority to commit the necessary services and equipment to respond to the discharge and to request assistance from local Fire Department, Sheriff, Police Department, contractors, or other responders, as appropriate.

The RC will direct notifications and initial response actions in accordance with training and capabilities. In the event of a fire or emergency situation that threatens the health and safety of those present at the site, the RC will direct evacuations and contact the fire and police departments.

In the event of an emergency involving outside response agencies, the RC's primary responsibility is to provide information regarding the characteristics of the materials and equipment involved and to provide access to Targa resources as requested. The RC shall also take necessary measures to control the flow of people, emergency equipment, and supplies and obtain

the support of the Police Department and/or Sheriff's Department as needed to maintain control of the site. These controls may be necessary to minimize injuries and confusion.

Finally, the RC serves as the coordinator for radio and phone communications by acquiring all essential information and ensuring clear communication of information to emergency response personnel. The RC has access to reference material at the Corporate level and/or field office, either as printed material or on computer files, that can further assist the response activities.

Whenever circumstances permit, the RC transmits assessments and recommendations to Targa Regulatory Affairs and Environmental, for direction.

- In the event that the responsible facility person, indicated in the General Facility Information section of the SPCC Plan, or their designate, is not available, the responsibility and authority for initiating a response to a discharge rests with the most senior Targa employee on site at the time the discharge is discovered.

2.2 Response Activities

In the event of a discharge, the first priority is to stop the product flow and to shut off all ignition sources, followed by the containment, control, and mitigation of the discharge. This Contingency Plan breaks actions to be performed to respond to an oil discharge into different phases, described in greater detail in the checklists below.

2.2.1 Discharge Discovery and Source Control

Minor Discharge. A minor discharge (i.e., small volume leak from transfer lines or process equipment) will be discovered by Targa facility personnel or by contractor personnel.

Major Discharge. A major discharge from process equipment and/or transfer lines would be identified by Targa facility personnel or by contractor personnel.

Notifications to the National Response Center, Targa Regional Manager, and the Local Emergency Planning Committee must occur immediately upon discovery of reportable discharges. See **Section 1.1** of this Spill Contingency Plan for contact information.

Checklist for Discharge Discovery and Source Control	
Completed	**Actions**
	Immediately report the discharge to the RC, providing the following information: Exact location; Material involved; Quantity involved; Topographic and environmental conditions; Circumstances that may hinder response; and Injuries, if any.
	Turn off all sources of ignition and isolate power sources.
	Turn off pumps and close valves that charge or provide flow to the source of the leak.

2.2.2 Assessment and Notifications

The following tasks will generally be conducted by the RC or their designee.

Checklist for Assessment and Notifications	
Completed	**Actions**
	Investigate the discharge to assess the actual or potential threat to human health or the environment: Location of the discharge relative to receiving water bodies; Quantity of spilled material; Ambient conditions (temperature, rain); Other contributing factors such as fire or explosion hazards; and Sensitive receptors downstream.
	Request outside assistance from local emergency responders and spill response contractors, as needed.
	Evaluate the need to evacuate facility and evacuate employees, as needed.
	Notify the fire/police departments and the Local Emergency Planning Committee to assess whether community evacuation is needed.
	Notify immediately: 911 Response Contractor(s), as needed.
	Communicate with neighboring property owners and industrial neighbors regarding the discharge and actions taken to mitigate the damage.

2.2.3 Control and Recovery

The RC directs the initial control of the oil flow by Targa and/or contractor personnel. The actions taken will depend on whether the oil has reached water or is still on land. Every effort will be made to prevent oil from reaching water.

If the oil has not yet reached water:

Completed	Actions
	Deploy sand bags and absorbent socks down gradient from the oil, or erect temporary barriers such as trenches or mounds to prevent the oil from flowing towards surface waters. See the Contingency Plan Map, Figure C1, at the end of this Contingency Plan for possible boom deployment locations.
	Implement land based response actions (countermeasure) such as digging temporary containment pits, ponds, or curbs to prevent the flow of oil into the surface waters.
	Deploy absorbent sock and sorbent material along the shoreline to prevent oil from entering waters.

If the oil has reached water:

Completed	Actions
	Contact cleanup contractor(s).
	If the oily water reaches (or threatens to reach) navigable waters, notify the local fire/sheriff departments to limit access to the river by local residents until the oil has been contained and recovered. Additionally, notify downstream water users of the spill and of actions that will be taken to protect these downstream receptors.
	Deploy floating booms immediately downstream from the release point. Area surface waters are generally narrow. Floating boom deployment most probably would not require the use of a boat.
	Control the oil flow on the ground by placing absorbent socks and other sorbent material or physical barriers (e.g., "kitty litter," sandbags, earthen berm, trenches) across the oil flow path.
	Deploy additional floating booms across the whole width of the creek(s) at the next access point downstream from the release point.
	Deploy protective booming measures for downstream receptors that may be impacted by the spill.

2.2.4 Disposal of Recovered Product and Contaminated Response Material

The RC ensures that all contaminated materials classified as hazardous waste are disposed of in accordance with all applicable solid and hazardous waste regulations.

Completed	Actions
	Place any recovered product that can be recycled into portable tanks or stock tanks at the facility, at the direction of the RC.
	Dispose of recovered product not suitable for on-site recycling with the rest of the waste collected during the response efforts.
	Collect all debris in properly labeled waste containers (impervious bags, drums, or buckets).
	Dispose of contaminated material in accordance with all applicable solid and hazardous waste regulations using a licensed waste hauler and disposal facility, after appropriately characterizing the material for collection and disposal.
	Dispose of all contaminated response material within 2 weeks of the discharge.

2.2.5 Termination

The RC ensures that cleanup has been completed and that the contaminated area has been treated or mitigated according to the applicable regulations and State/Federal cleanup action levels. Targa Regulatory Affairs and Environmental will collaborate with the local, State and Federal authorities regarding the assessment of damages.

Completed	Actions
	Ensure that all repairs to the defective equipment have been completed.
	Review circumstances that led to the discharge and take all necessary precautions to prevent a recurrence.
	Evaluate the effectiveness of the response activities and make adjustments as necessary to response procedures and personnel training.
	Carry out personnel and contractor debriefings as necessary to emphasize prevention measures or to communicate changes in operations or response procedures.
	Submit any required follow-up reports to Targa Regulatory Affairs and Environmental Manager submission to authorities.
	40 CFR 112.4(a) In the case where the discharge (as defined in 40 CFR 112.1(b)) was greater than 1,000 gallons, or, where the discharge was 42 gallons, or more, in each of two discharges within any 12-month period (as defined in 40 CFR 112.1(b)), the Targa Regulatory Affairs and Environmental is responsible for submitting the required information within 60 days to the EPA Regional Administrator. The RC will consult with Targa Regulatory Affairs and Environmental for assistance in preparing required follow-up reports.
	Within 30 days of the discharge, the RC will convene an incident critique including all appropriate persons that responded to the spill. The goal of the incident critique is to discuss lessons learned, the efficacy of the Contingency Plan and its implementation, and coordination of this Plan, RC and other State and local plans.
	Within 60 days of the critique, the Oil Spill Contingency Plan will be updated (as needed) to incorporate the results, findings, and suggestions developed during the critique.

2.3 Discharge Notification

Instructions and phone numbers for reporting a discharge are provided in **Section 1.1** of this Spill Contigency Plan. Targa Regulatory Affairs and Environmental be responsible for reporting all discharges to appropriate government agencies.

If the facility discharges more than 1,000 U.S. gallons of oil in a single discharge, or discharges of 42 gallons, or more, of oil in each of two discharges, occurring within any twelve month period, a report of the information will be submitted to the EPA Regional Administrator within 60 days from the time of the discharge. Targa Regulatory Affairs and Environmental will be responsible for this report.

3.0 RESPONSE RESOURCES AND PREPAREDNESS ACTIVITIES

3.1 Equipment, Supplies, Services, and Manpower

Targa personnel and/or contractors will be able to respond and contain most minor discharges (42 gallons or less) occurring at the facility, and, initially mitigate a major discharge while waiting for additional material or support from outside contractors. An inventory of spill response materials is maintained at one or all of the following:

A. The facility;
B. A regional office;
C. In Targa vehicles which travel to the facility;
D. By spill response contractors (Appendix F of the SPCC Plan).

Targa spill response materials are replenished as soon as practicable after use. Targa utilizes spill response equipment, materials, and supplies provided by 3rd party spill response contractors. Some spill response contractors may have contractual agreements with Targa and some may provide service on demand. At least one spill response contractor is available locally (usually <2 hour response time). The contractors listed in this plan maintain inventories of available response equipment. Targa maintains contracts with pipeline contractors that provide personnel and equipment to contain and/or control the spill until the spill response contractor could respond to the scene.

The response equipment necessary to respond to a likely spill event from spill sources addressed by this contingency plan would include the following materials generally maintained by all of the spill response contractors:

- Absorbents pads
- Granular absorbents
- Hand tools (shovels, rakes, etc.)
- Booms (floating or pig-style containment boom)

This contingency plan is designed to address releases from sources covered under 40 CFR 112.7, including small releases from truck loading, releases from separator leaks, and potential leaks of above ground transfer lines. The most likely spill event from these spill sources is not anticipated to exceed 55 gallons. The response materials required to contain a "most-likely" release of 55 gallons or more would include the following:

- 2 bundles of absorbent pads, or
- 2 30-lbs. bags granular absorbent (e.g., GatorSorb)

Targa has multiple employees trained and available to respond to minor oil discharges. Targa personnel may be assisted by additional employees from the contract spill responders. Personnel

responding to a spill will receive instruction relative to the facilities' layout, safety issues, response strategy, with the SPCC Plan, and Oil Spill Contingency Plan for this facility, as necessary, prior to entering the facility.

To respond to larger discharges and ensure the removal and disposal of cleanup debris, Targa has established working relationships with other oil spill response contractors (see **Section 1.1** of this Spill Contingency Plan of the SPCC Plan).). These contractors have access to additional resources such as personnel, equipment and materials.

3.2 Access to Receiving Water Bodies

Depending on the direction of the flow of a discharge from a flowlines or a facility, multiple surface drainage ditches and creeks could be affected. It is important to determine the direction of flow of a discharge for timely and efficient response to prevent the discharge from reaching the potentially impacted waterbody.

Using the Contingency Plan Map, Figure C1, at the end of this Contingency Plan, use the following procedure to identify receiving water access points and deploy response measures:

1. Identify the spill location on the map
2. Identify the direction of flow based on field observations and contours shown on the map
3. Identify roads on the map that intersect the surface waters
4. Deploy booms at road crossings upstream of surface waters
5. Deploy booms at locations where the spill can be dammed and contained.
6. Deploy booms at locations necessary to protect sensitive areas as marked on the Contingency Plan Map, shown as Figure C1, at the end of this Contingency Plan.
7. If the discharge could adversely affect more than one water use, and, where response operations may not be adequate to protect all water uses, an order of priority of action will be determined by the RC, or their designate.

3.3 Communications and Control

A central coordination center will be set up at a designated office location in the event of a discharge. The designated office is equipped with a variety of fixed and mobile communication equipment (such as telephone, fax, cell phones, two-way radios, computers, etc.) to ensure continuous communication with Targa management, responders, authorities, and other interested parties. Communications equipment includes:

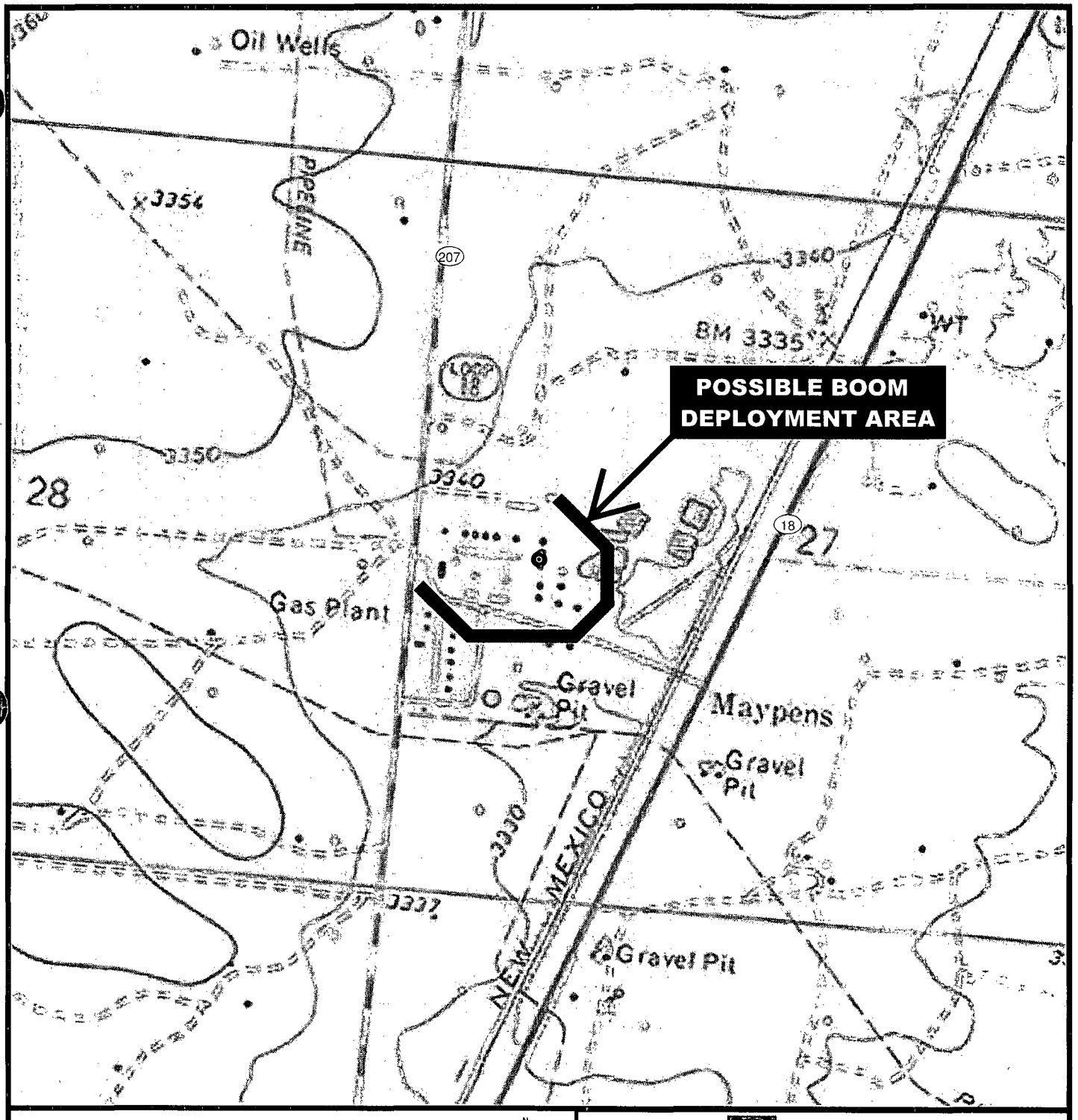
- **Cell phones.** Each field vehicle and the RC are provided with a cell phone. The RC and/or his alternate can be reached by cell phone 7 days a week, 24 hours a day.
- **Additional equipment.** Additional equipment will be obtained from response contractors in the event that more communications equipment is necessary.

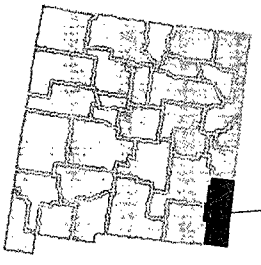
The RC, or their designate, is responsible for communicating the status of the response operations and for sharing relevant information with involved parties, including local authorities (such as Police and Fire Departments). Targa Regulatory Affairs and Environmental will notify State and Federal authorities. In the event that local response agencies, State authorities, or a Federal On-Site Coordinator (OSC) assumes Incident Command, the RC will function as the facility representative in the Unified Command structure.

3.4 Training Exercises and Updating Procedures

Targa has established and maintains an on-going training program to ensure that personnel responding to oil discharges are properly trained and that all necessary equipment is available to them. The program includes on-the-job training on the proper deployment of response equipment and periodic practice drills during which Targa personnel are asked to deploy equipment and material in response to a simulated discharge. The RC is responsible for implementing and evaluating employee preparedness training.

Following a response to an oil discharge, the RC will evaluate the actions taken and identify procedural areas where improvements are needed. The RC will conduct a briefing with field personnel, contractors, and local emergency responders to discuss lessons learned and will integrate the outcome of the discussion in subsequent SPCC briefings and employee training seminars. As necessary, Targa will amend this Contingency Plan or the SPCC Plan to reflect changes made to the facility equipment and procedures. A Professional Engineer will certify any technical amendment to the SPCC Plan.





N
W
E
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0 500 1,000 2,000 3,000
Feet

Reference

U.S.G.S. 24K SERIES QUAD MAPS, EUNICE, NM.

ESRI TECHNOLOGY AUTHORIZED CONSULTANT

TARGA

HOUSTON, TEXAS

SOUTH EUNICE COMPRESSOR STATION

CONTINGENCY MAP

LEA COUNTY, NEW MEXICO

C-K ASSOCIATES, LLC

BATON ROUGE, LOUISIANA

Drawn:	CAL/AM9.2
Checked:	JWZ
Approved:	PLM
Date:	10/11/10
Dwg. No.:	A5904W-C1

FIGURE C1

APPENDIX H

SITE CHARACTERISTICS
SUPPORTING DOCUMENTATION

New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

UTMNAD83 Radius Search (in meters):

Easting (X): 673305.32 **Northing (Y):** 3582088.8 **Radius:** 403

New Mexico Office of the State Engineer
Wells Without Well Log Information

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

POD Number	Sub basin	Use	County	Source	q 64	q 16	q 4	Sec	Tws	Rng	X	Y	Distance
CP 00243		IND	LE	Shallow	3	3	1	27	22S	37E	673281	3582246*	159
CP 00231		IND	LE		3	1	3	27	22S	37E	673288	3581844*	245
CP 00234		IND	LE		3	1	3	27	22S	37E	673288	3581844*	245
CP 00006		IND	LE		4	1	3	27	22S	37E	673488	3581844*	305
CP 00007		IND	LE		4	1	3	27	22S	37E	673488	3581844*	305
CP 00232		IND	LE		4	1	3	27	22S	37E	673488	3581844*	305
CP 00233		IND	LE		4	1	3	27	22S	37E	673488	3581844*	305
CP 00233 S		IND	LE	Shallow	1	2	3	27	22S	37E	673690	3582051*	386
CP 00243 S		IND	LE	Shallow	1	2	3	27	22S	37E	673690	3582051*	386

Record Count: 9

UTMNAD83 Radius Search (in meters):

Easting (X): 673305.32 **Northing (Y):** 3582088.8 **Radius:** 403

***UTM location was derived from PLSS - see Help**

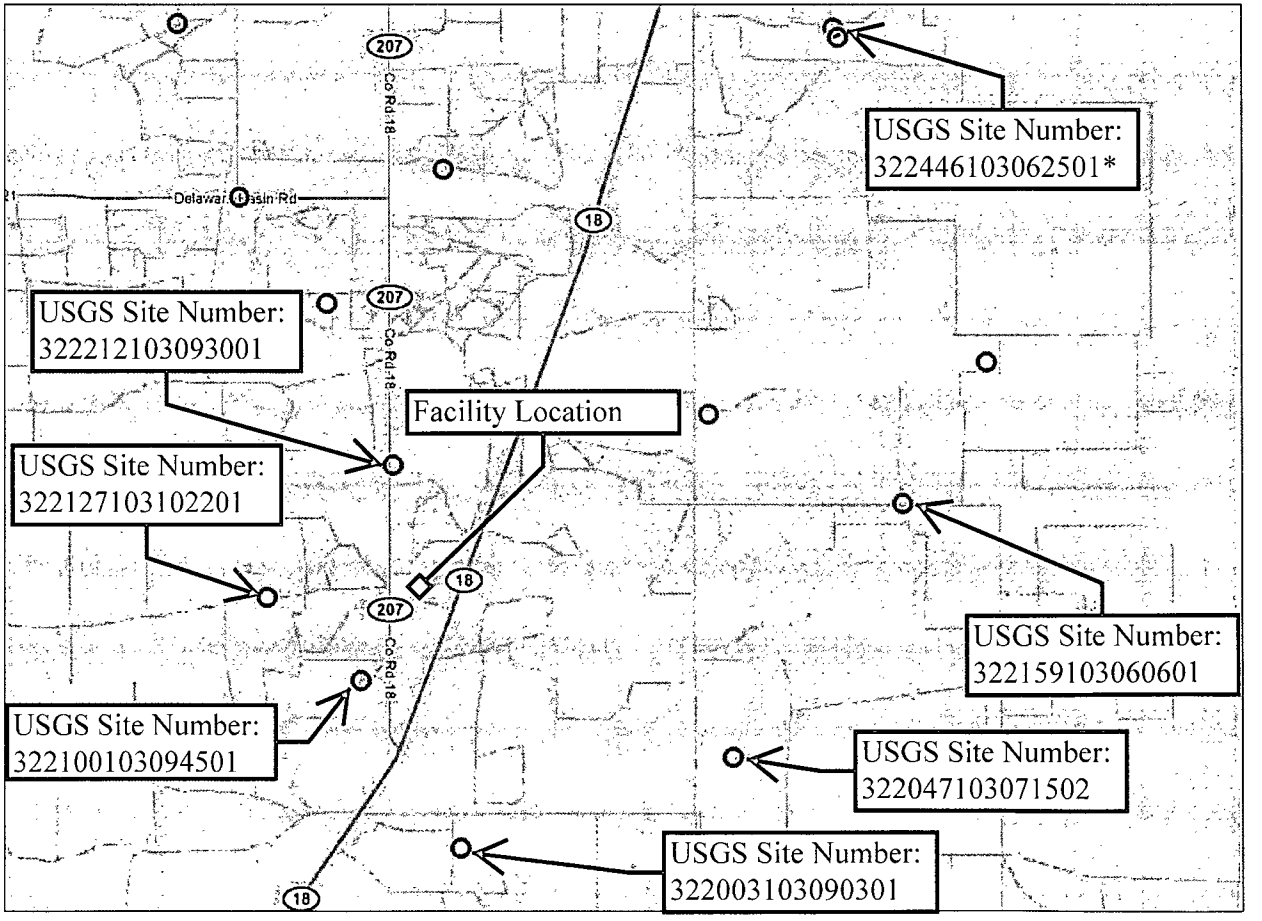
National Water Information System: Mapper

Include: All sites | Zoom to: Select a State... | or Enter a Place or Address... | Go | NWIS Home | Instructions | Disclaimer

Status:
***Click** a site to access its data.*
(Current zoom level is 13.)
Cancel Drawing

- **Surface-Water Sites** *(streams, lakes, wetlands, estuaries, ocean, diversions, outfalls)*
- **Groundwater Sites** *(wells, any subsurface)*
  - Any data
  - Multiple ground-water sites
- **Spring Sites**
- **Atmospheric Sites** *(climate, weather)*
- **Other Sites** *(facilities, water use, any other)*

List Sites | KML



** References to non-U.S. Department of the Interior (DOI) products do not constitute an endorsement by the DOI. By viewing the Google Maps API on this web site the user agrees to these TERMS of Service set forth by Google.*

NOTE:
* Site Number 322446103062501 is the closest site to the facility location with water quality data measuring Total Dissolved Solids (TDS).

National Water Information System: Web Interface

USGS 322127103102201 22S.37E.28.31243

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°21'41", Longitude 103°10'23" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 112 feet
Land surface altitude: 3,342.50 feet above sea level NGVD29.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1965-10-22	2006-02-22	8

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:43:12 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# ---------------------------------
# agency_cd     Agency Code
# site_no       USGS site number
# lev_dt        date level measured
# lev_tm        time level measured
# lev_tz_cd     time datum
# lev_va        level value in feet below land surface
# sl_lev_va     level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 322127103102201 22S.37E.28.31243
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    322127103102201 1965-10-22                      61.20
USGS    322127103102201 1970-12-01                      61.64           R
USGS    322127103102201 1976-01-20                      62.47
USGS    322127103102201 1986-03-04                      62.43
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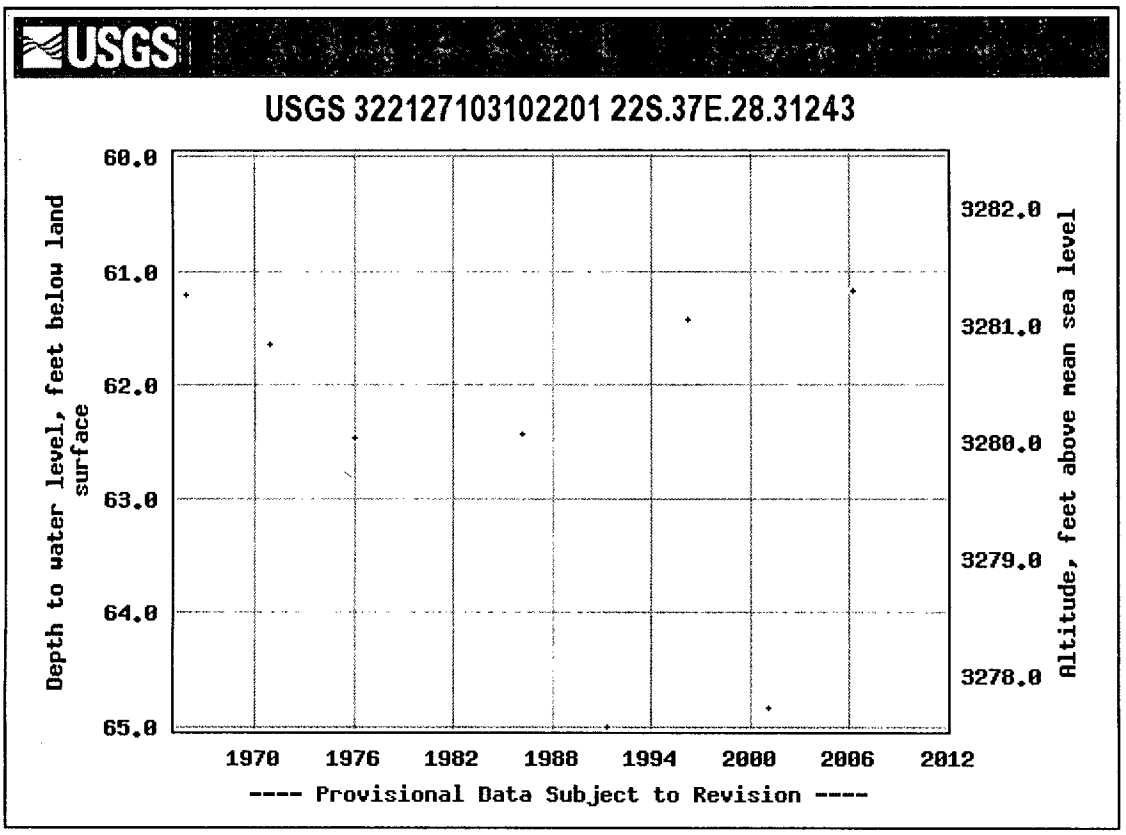

USGS
USGS 322127103102201 22S.37E.28.31243
Depth to water level, feet below land surface
60.0
61.0
62.0
63.0
64.0
65.0
Altitude, feet above mean sea level
3282.0
3281.0
3280.0
3279.0
3278.0
1970
1976
1982
1988
1994
2000
2006
2012
---- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 322100103094501 22S.37E.33.223121

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°21'13", Longitude 103°09'45" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 200 feet
Land surface altitude: 3,346.60 feet above sea level NGVD29.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

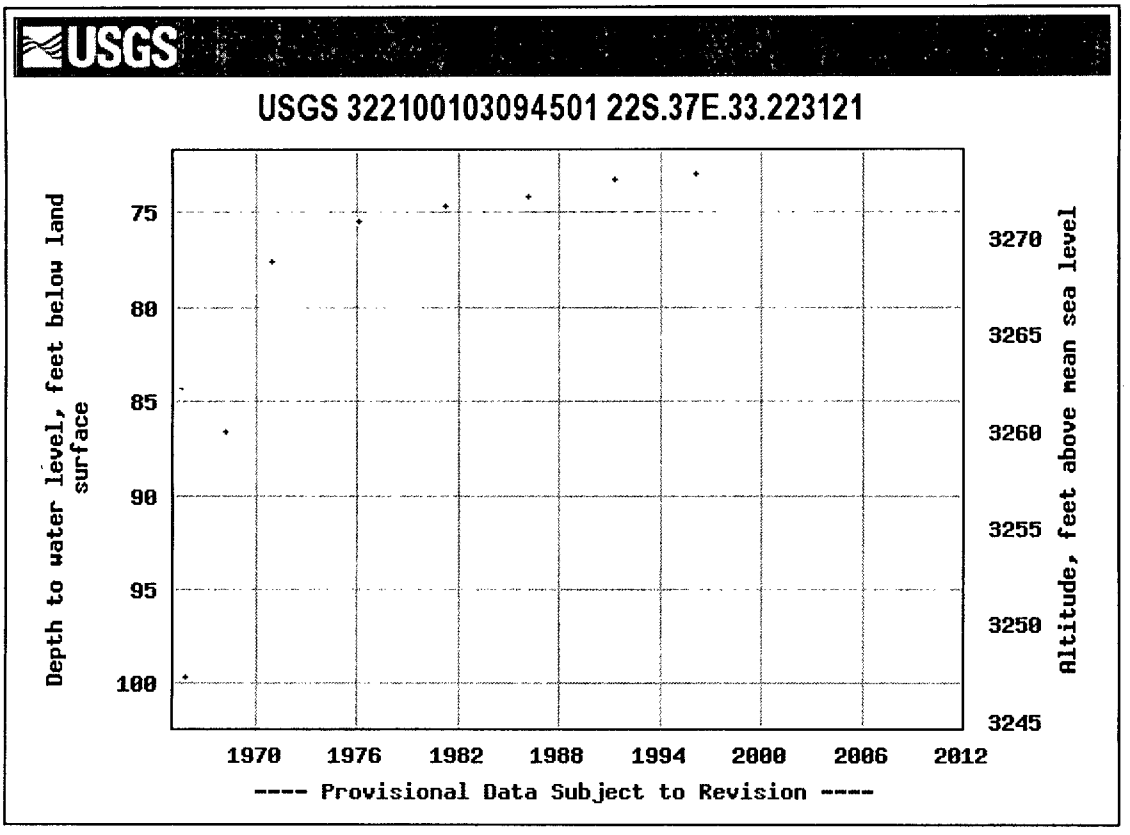
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1965-10-28	1996-02-14	8

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:45:29 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# --------------------------------
# agency_cd     Agency Code
# site_no       USGS site number
# lev_dt        date level measured
# lev_tm        time level measured
# lev_tz_cd     time datum
# lev_va        level value in feet below land surface
# sl_lev_va     level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 322100103094501 22S.37E.33.223121
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    322100103094501 1965-10-28                      99.60           R
USGS    322100103094501 1968-03-07                      86.62           R
USGS    322100103094501 1970-12-02                      77.56
USGS    322100103094501 1976-01-16                      75.50
USGS    322100103094501 1981-03-18                      74.70
USGS    322100103094501 1986-03-04                      74.13
USGS    322100103094501 1991-04-26                      73.20
USGS    322100103094501 1996-02-14                      72.97
```


USGS
USGS 322100103094501 22S.37E.33.223121
Depth to water level, feet below land surface
75
80
85
90
95
100
Altitude, feet above mean sea level
3270
3265
3260
3255
3250
3245
1970
1976
1982
1988
1994
2000
2006
2012
---- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 322003103090301 23S.37E.03.124441

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°20'16", Longitude 103°09'05" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 350 feet
Land surface altitude: 3,304.00 feet above sea level NGVD29.
Well completed in "Chinle Formation" (231CHNL) local aquifer

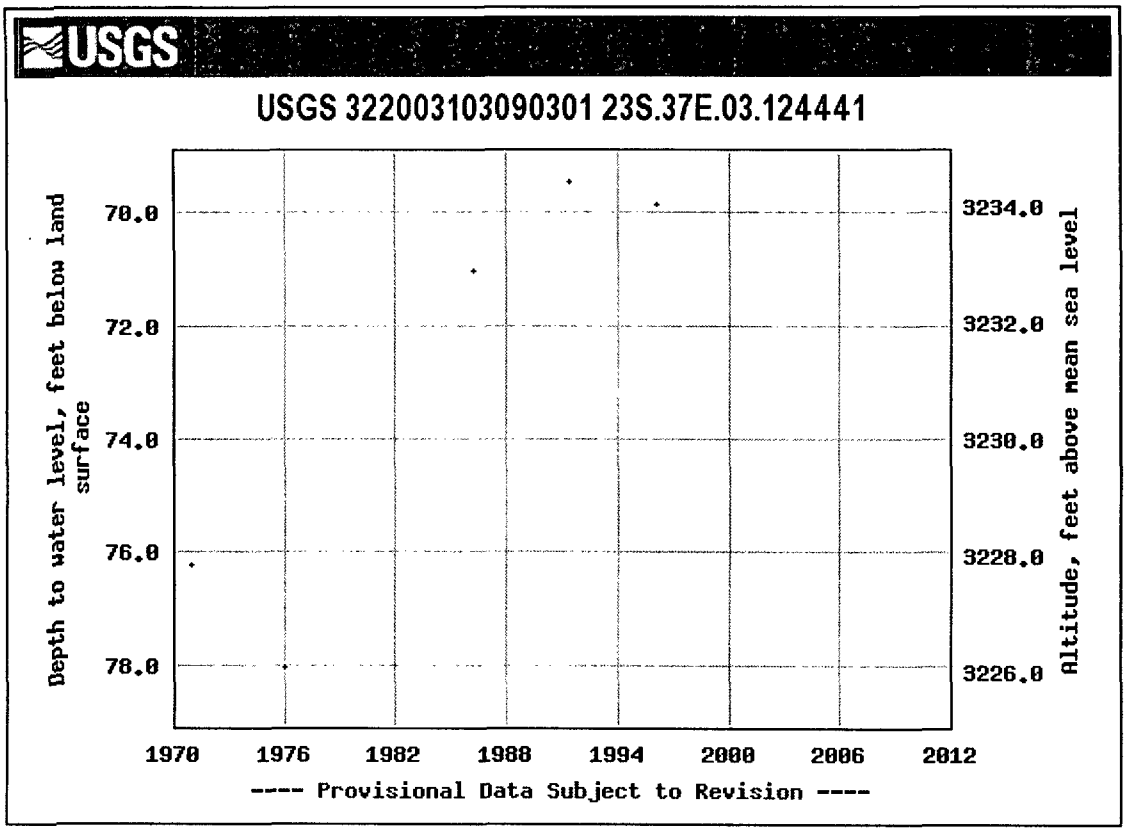
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1970-12-18	1996-02-21	5

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:47:57 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# ---------------------------------
# agency_cd      Agency Code
# site_no        USGS site number
# lev_dt         date level measured
# lev_tm         time level measured
# lev_tz_cd      time datum
# lev_va         level value in feet below land surface
# sl_lev_va      level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 322003103090301 23S.37E.03.124441
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    322003103090301 1970-12-18                      76.23           R
USGS    322003103090301 1976-01-16                      78.04
USGS    322003103090301 1986-03-20                      71.05
USGS    322003103090301 1991-05-16                      69.45
USGS    322003103090301 1996-02-21                      69.85
```


USGS
USGS 322003103090301 23S.37E.03.124441
Depth to water level, feet below land surface
70.0
72.0
74.0
76.0
78.0
Altitude, feet above mean sea level
3234.0
3232.0
3230.0
3228.0
3226.0
1970
1976
1982
1988
1994
2000
2006
2012
---- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 322047103071502 22S.37E.36.1342223A

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°20'47", Longitude 103°07'15" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 65 feet
Land surface altitude: 3,280 feet above sea level NGVD29.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

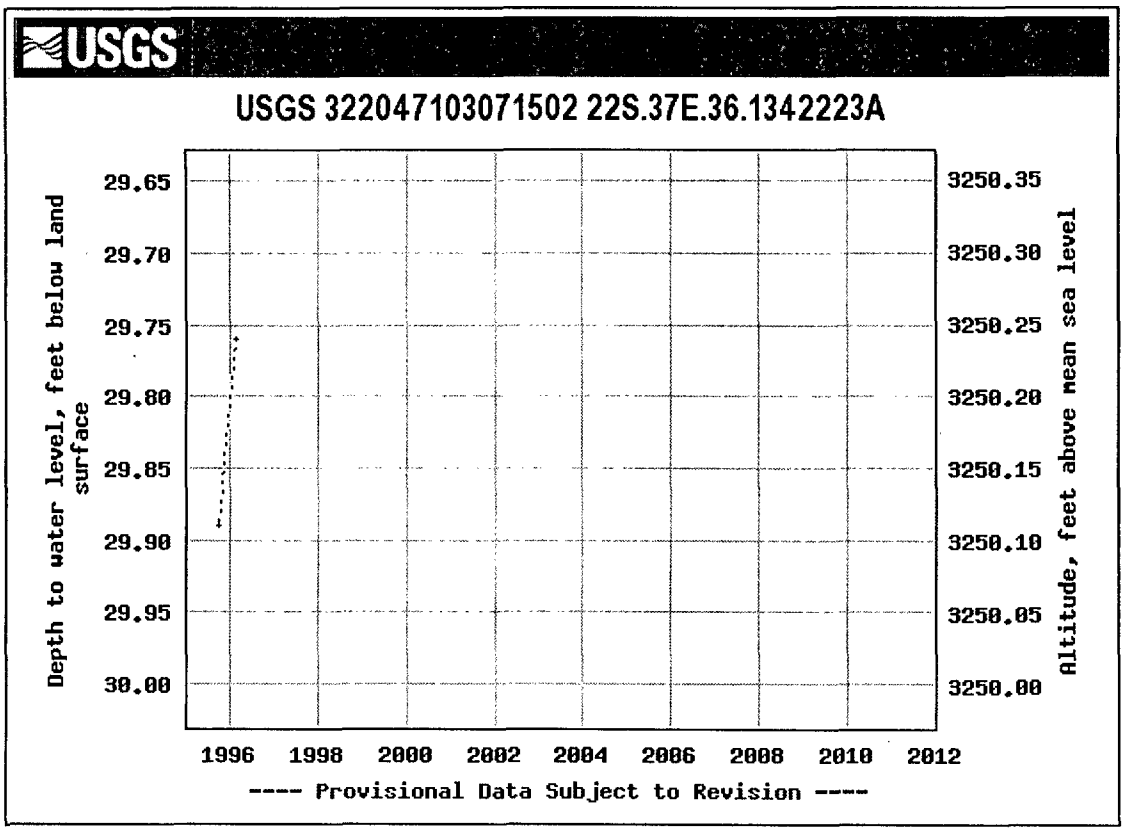
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1995-10-04	1996-02-14	2

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:52:26 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# -------------------------------
# agency_cd     Agency Code
# site_no       USGS site number
# lev_dt        date level measured
# lev_tm        time level measured
# lev_tz_cd     time datum
# lev_va        level value in feet below land surface
# sl_lev_va     level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 322047103071502 22S.37E.36.1342223A
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    322047103071502 1995-10-04                      29.89
USGS    322047103071502 1996-02-14                      29.76
```


USGS
USGS 322047103071502 22S.37E.36.1342223A
Depth to water level, feet below land surface
29.65
29.70
29.75
29.80
29.85
29.90
29.95
30.00
3250.35
3250.30
3250.25
3250.20
3250.15
3250.10
3250.05
3250.00
Altitude, feet above mean sea level
1996
1998
2000
2002
2004
2006
2008
2010
2012
---- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 321948103073601 23S.37E.02.42211

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°20'00", Longitude 103°07'37" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 70 feet
Land surface altitude: 3,295.80 feet above sea level NGVD29.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

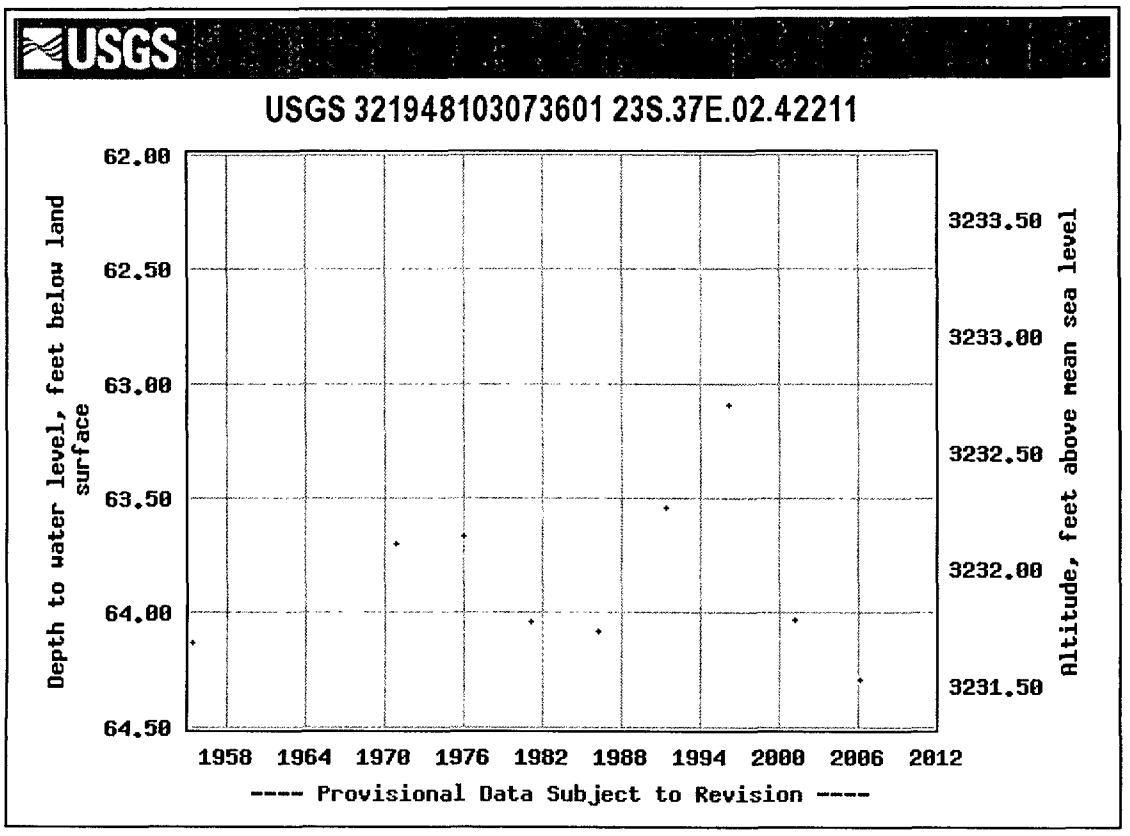
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1955-06-03	2006-02-22	9

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:49:31 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# ---------------------------------
# agency_cd     Agency Code
# site_no       USGS site number
# lev_dt        date level measured
# lev_tm        time level measured
# lev_tz_cd     time datum
# lev_va        level value in feet below land surface
# sl_lev_va     level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 321948103073601 23S.37E.02.42211
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    321948103073601 1955-06-03                      64.13           R
USGS    321948103073601 1970-12-18                      63.70
USGS    321948103073601 1976-01-16                      63.67
USGS    321948103073601 1981-03-19                      64.04
USGS    321948103073601 1986-03-20                      64.08
USGS    321948103073601 1991-05-15                      63.54
USGS    321948103073601 1996-02-29                      63.09
USGS    321948103073601 2001-03-09                      64.03
USGS    321948103073601 2006-02-22                      64.29
```


USGS
USGS 321948103073601 23S.37E.02.42211
Depth to water level, feet below land surface
62.00
62.50
63.00
63.50
64.00
64.50
Altitude, feet above mean sea level
3233.50
3233.00
3232.50
3232.00
3231.50
1958
1964
1970
1976
1982
1988
1994
2000
2006
2012
---- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 322212103093001 22S.37E.22.313343

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°22'26", Longitude 103°09'32" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: 145 feet
Land surface altitude: 3,350.20 feet above sea level NGVD29.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

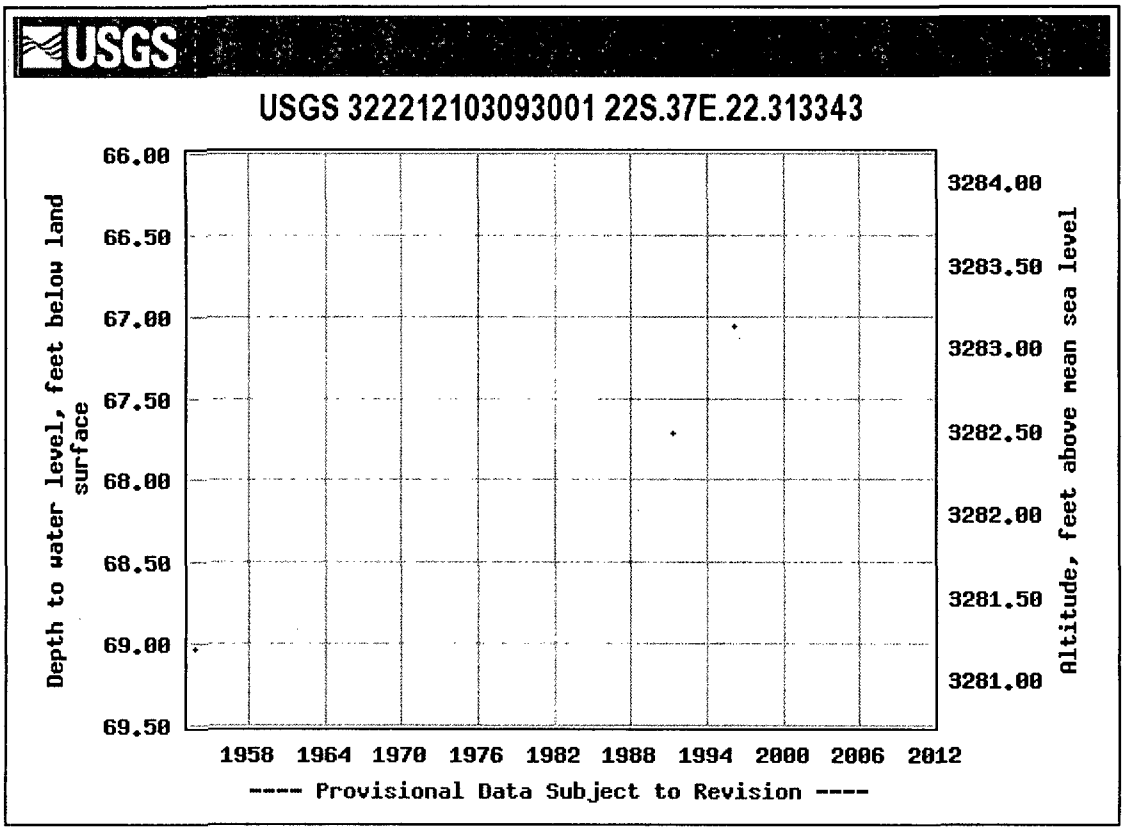
AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1953-09-29	1996-02-27	3

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

```
#
#
# US Geological Survey groundwater levels
# retrieved: 2011-02-14 16:39:27 EST
# URL: http://waterdata.usgs.gov/nwis/gwlevels
#
# The fields in this file include:
# -------------------------------
# agency_cd     Agency Code
# site_no       USGS site number
# lev_dt        date level measured
# lev_tm        time level measured
# lev_tz_cd     time datum
# lev_va        level value in feet below land surface
# sl_lev_va     level value referenced to mean sea level
# lev_status_cd level status code
#  The 'lev_status_cd' field is defined at
#   http://waterdata.usgs.gov/nwis/gwlevels/?help
#
# Sites in this file include:
#  USGS 322212103093001 22S.37E.22.313343
#
#
agency_cd       site_no lev_dt  lev_tm  lev_tz_cd       lev_va  sl_lev_va       lev_status_cd
5s      15s     10d     4s      5s      12s     12s     1s
USGS    322212103093001 1953-09-29                      69.04
USGS    322212103093001 1991-04-26                      67.71
USGS    322212103093001 1996-02-27                      67.06
```


USGS
USGS 322212103093001 22S.37E.22.313343
Depth to water level, feet below land surface
66.00
66.50
67.00
67.50
68.00
68.50
69.00
69.50
Altitude, feet above mean sea level
3284.00
3283.50
3283.00
3282.50
3282.00
3281.50
3281.00
1958
1964
1970
1976
1982
1988
1994
2000
2006
2012
----- Provisional Data Subject to Revision ----

National Water Information System: Web Interface

USGS 322446103062501 22S.37E.01.44

Available data for this site: SUMMARY OF ALL AVAILABLE DATA | GO

Well Site

DESCRIPTION:

Latitude 32°24'54", Longitude 103°06'35" NAD27
Lea County, New Mexico , Hydrologic Unit 13070007
Well depth: not determined.
Land surface altitude: 3,346 feet above sea level NGVD29.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field/Lab water-quality samples	1953-10-14	1958-09-08	2

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

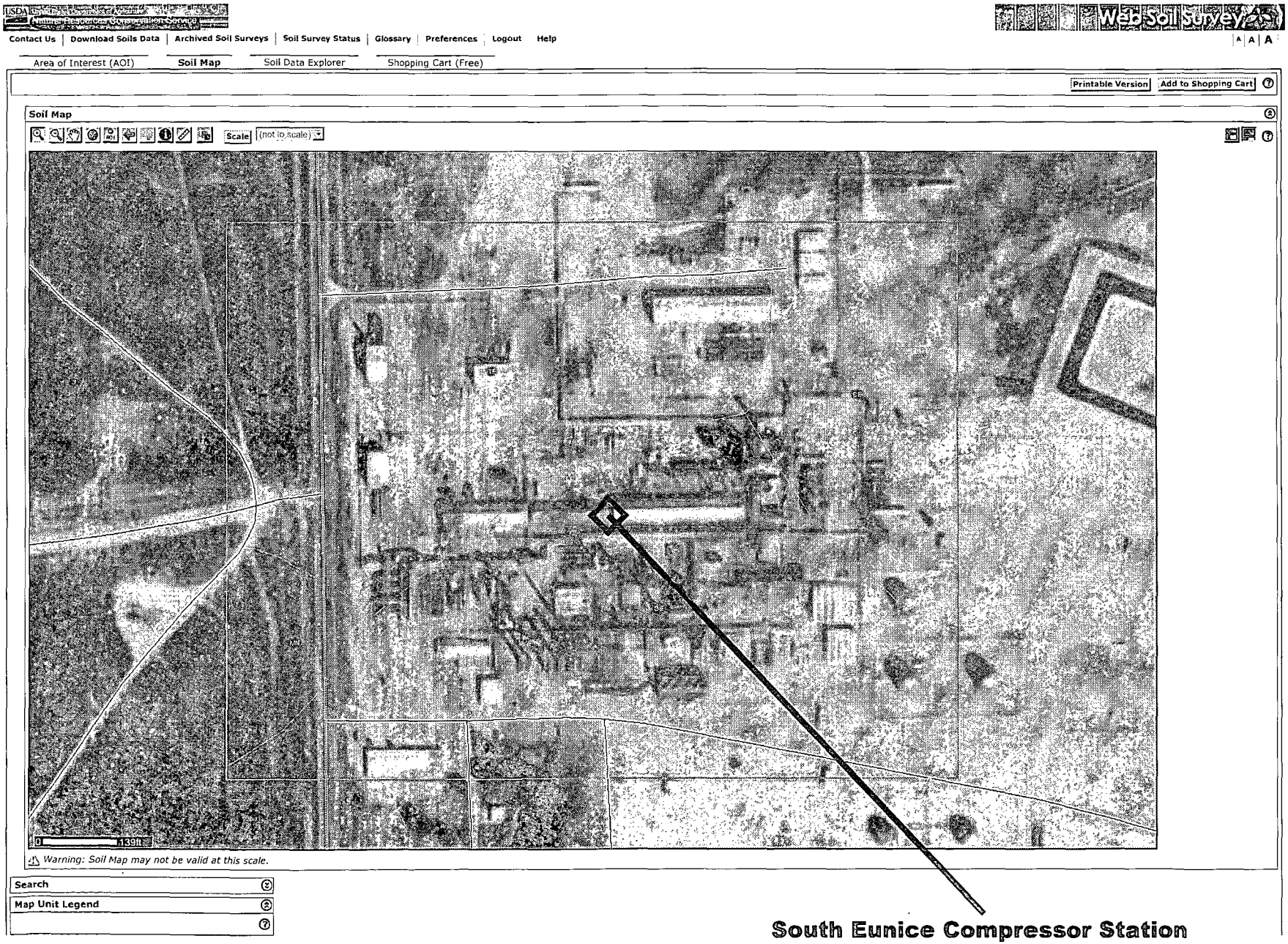
```
#
# File created on 2011-02-14 17:27:26 EST
#
# U.S. Geological Survey
#
# This file contains selected water-quality data for stations in the National Water
# Information System water-quality database.  Explanation of codes found in this file are
# followed by the retrieved data.
#
# The data you have secured from the USGS NWISWeb database may include data that have
# not received Director's approval and as such are provisional and subject to revision.
# The data are released on the condition that neither the USGS nor the United States
# Government may be held liable for any damages resulting from its authorized or
# unauthorized use.
#
# To view additional data-quality attributes, output the results using these options:
# one result per row, expanded attributes.  Additional precautions are at:
# http://waterdata.usgs.gov/nwis/qwdata?help#Data_retrievals_precautions.
#
#  agency_cd                  - Agency Code
#  site_no                    - USGS site number
#  sample_dt                  - Begin date
#  sample_tm                  - Begin time
#  sample_end_dt              - End date
#  sample_end_tm              - End time
#  sample_start_time_datum_cd - Time datum
#  tm_datum_rlbty_cd          - Time datum reliability code
#  coll_ent_cd                - Agency Collecting Sample Code
#  medium_cd                  - Sample Medium Code
#  tu_id                      - Taxonomic unit code
#  body_part_id               - Body part code
#  parm_cd                    - Parameter code
#  remark_cd                  - Remark code
#  result_va                  - Parameter value
#  val_qual_tx                - Result value qualifier code
#  meth_cd                    - Method code
#  dqi_cd                     - Data-quality indicator code
#  rpt_lev_va                 - Reporting level
#  rpt_lev_cd                 - Reporting level type
#  lab_std_va                 - Lab standard deviation
#  anl_ent_cd                 - Analyzing entity code
#
# The following parameters are included:
#  00028  - Agency analyzing sample, code
#  00095  - Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius
#  00191  - Hydrogen ion, water, unfiltered, calculated, milligrams per liter
#  00400  - pH, water, unfiltered, field, standard units
#  00405  - Carbon dioxide, water, unfiltered, milligrams per liter
#  00440  - Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter
#  00445  - Carbonate, water, unfiltered, fixed endpoint (pH 8.3) titration, field, milligrams per liter
#  00618  - Nitrate, water, filtered, milligrams per liter as nitrogen
#  00900  - Hardness, water, milligrams per liter as calcium carbonate
#  00915  - Calcium, water, filtered, milligrams per liter
#  00925  - Magnesium, water, filtered, milligrams per liter
#  00933  - Sodium plus potassium, water, filtered, milligrams per liter as sodium
#  00940  - Chloride, water, filtered, milligrams per liter
#  00945  - Sulfate, water, filtered, milligrams per liter
#  00950  - Fluoride, water, filtered, milligrams per liter
#  00955  - Silica, water, filtered, milligrams per liter as SiO2
#  70301  - Dissolved solids, water, filtered, sum of constituents, milligrams per liter
#  70303  - Dissolved solids, water, filtered, tons per acre-foot
#  71851  - Nitrate, water, filtered, milligrams per liter
#
# Description of sample_start_time_datum_cd:
# MST  - Mountain Standard Time
#
# Description of tm_datum_rlbty_cd:
# T  - Transferred
#
# Description of coll_ent_cd and anl_ent_cd:
# USGS-WRD  - U.S. Geological Survey-Water Resources Discipline
#
# Description of medium_cd:
# WG  - Groundwater
```

#
Description of tu_id:
http://www.itis.gov/
#
Description of body_part_id:
#
Description of remark_cd:
#
Description of val_qual_tx:
#
Description of meth_cd:
ALGOR - Computation by NWIS algorithm
#
Description of dqi_cd:
A - Historical data
#
Description of rpt_lev_cd:
#
Data for the following sites are included:
USGS 322446103062501 22S.37E.01.44
#

agency_cd	site_no	sample_dt	sample_tm	sample_end_dt	sample_end_tm	sample_start_time_datum_cd	tm_datum_rlbty_cd	coll_ent_cd	medium_cd	tu_id	body_p
5s	15s	10d	4d	8s	1s	11s	12s	5s	6s	11s	8s
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00028	1028	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00095	3330	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00440	189	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00445	0.0	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00618	8.58	ALGOR A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00900	990	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00915	222	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00925	107	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00933	380	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00945	841	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00950	3.10	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	00955	74.0	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	70301	2280	A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	70303	3.10	ALGOR A		
USGS	322446103062501	1953-10-14		MST	T	USGS-WRDWG	71851	38.0	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00028	1028	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00095	2180	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00191	0.00003	ALGOR A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00400	7.5	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00405	11	ALGOR A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00440	211	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00445	0.0	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00900	580	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00940	320	A		
USGS	322446103062501	1958-09-08		MST	T	USGS-WRDWG	00945	448	A		

SOURCE:

USDA, Web Soil Survey Database



Area of Interest (AOI) search, Soil Map Results

Lea County, New Mexico (NM025)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BE	Berino-Cacique loamy fine sands association	5.0	15.7%
MN	Midessa and wink fine sandy loams	1.6	5.0%
SE	Simona fine sandy loam, 0 to 3 percent slopes	13.1	40.9%
TF	Tonuco loamy fine sand	12.3	38.4%
Totals for Area of Interest		**32.0**	**100.0%**

USDA Web Soil Search Database Results of the Area of Interest (AOI), surrounding the North Eunice Compressor Station.

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Lea County, New Mexico

BE—Berino-Cacique loamy fine sands association

Map Unit Setting

Elevation: 3,000 to 3,400 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 195 to 205 days

Map Unit Composition

Berino and similar soils: 50 percent
Cacique and similar soils: 40 percent

Description of Berino

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock over calcareous sandy alluvium derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability (nonirrigated): 7c
Ecological site: Loamy Sand (R042XC003NM)

Typical profile

0 to 6 inches: Loamy fine sand
6 to 60 inches: Sandy clay loam

Description of Cacique

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent

Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 3.6 inches)

Interpretive groups

Land capability (nonirrigated): 7c
Ecological site: Sandy (R042XC004NM)

Typical profile

0 to 12 inches: Loamy fine sand
12 to 28 inches: Sandy clay loam
28 to 38 inches: Cemented material

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 9, Dec 9, 2008

Map Unit Description

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The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

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A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

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Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Lea County, New Mexico

MN—Midessa and wink fine sandy loams

Map Unit Setting

Elevation: 3,100 to 3,400 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days

Map Unit Composition

Midessa (ratliff) and similar soils: 45 percent
Wink and similar soils: 40 percent

Description of Midessa (ratliff)

Setting

Landform: Plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous alluvium and/or calcareous eolian deposits derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 6c
Ecological site: Loamy (R042XC007NM)

Typical profile

0 to 4 inches: Fine sandy loam
4 to 22 inches: Clay loam
22 to 60 inches: Clay loam

Description of Wink

Setting

Landform: Plains
Landform position (three-dimensional): Dip
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous sandy alluvium and/or calcareous sandy eolian deposits derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Land capability (nonirrigated): 7e
Ecological site: Sandy (R042XC004NM)

Typical profile

0 to 12 inches: Fine sandy loam
12 to 23 inches: Sandy loam
23 to 60 inches: Sandy loam

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 9, Dec 9, 2008

Map Unit Description

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Lea County, New Mexico

SE—Simona fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 3,000 to 4,000 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 59 to 62 degrees F
Frost-free period: 190 to 205 days

Map Unit Composition

Simona and similar soils: 85 percent

Description of Simona

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability (nonirrigated): 7s
Ecological site: Shallow Sandy (R042XC002NM)

Typical profile

0 to 8 inches: Fine sandy loam
8 to 16 inches: Gravelly fine sandy loam
16 to 26 inches: Cemented material

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 9, Dec 9, 2008

Map Unit Description

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Lea County, New Mexico

TF—Tonuco loamy fine sand

Map Unit Setting

Elevation: 3,190 to 3,900 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 59 to 62 degrees F
Frost-free period: 190 to 205 days

Map Unit Composition

Tonuco and similar soils: 85 percent

Description of Tonuco

Setting

Landform: Plains, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Eolian deposits derived from sedimentary rock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 6 to 20 inches to petrocalcic
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Very low (about 1.6 inches)

Interpretive groups

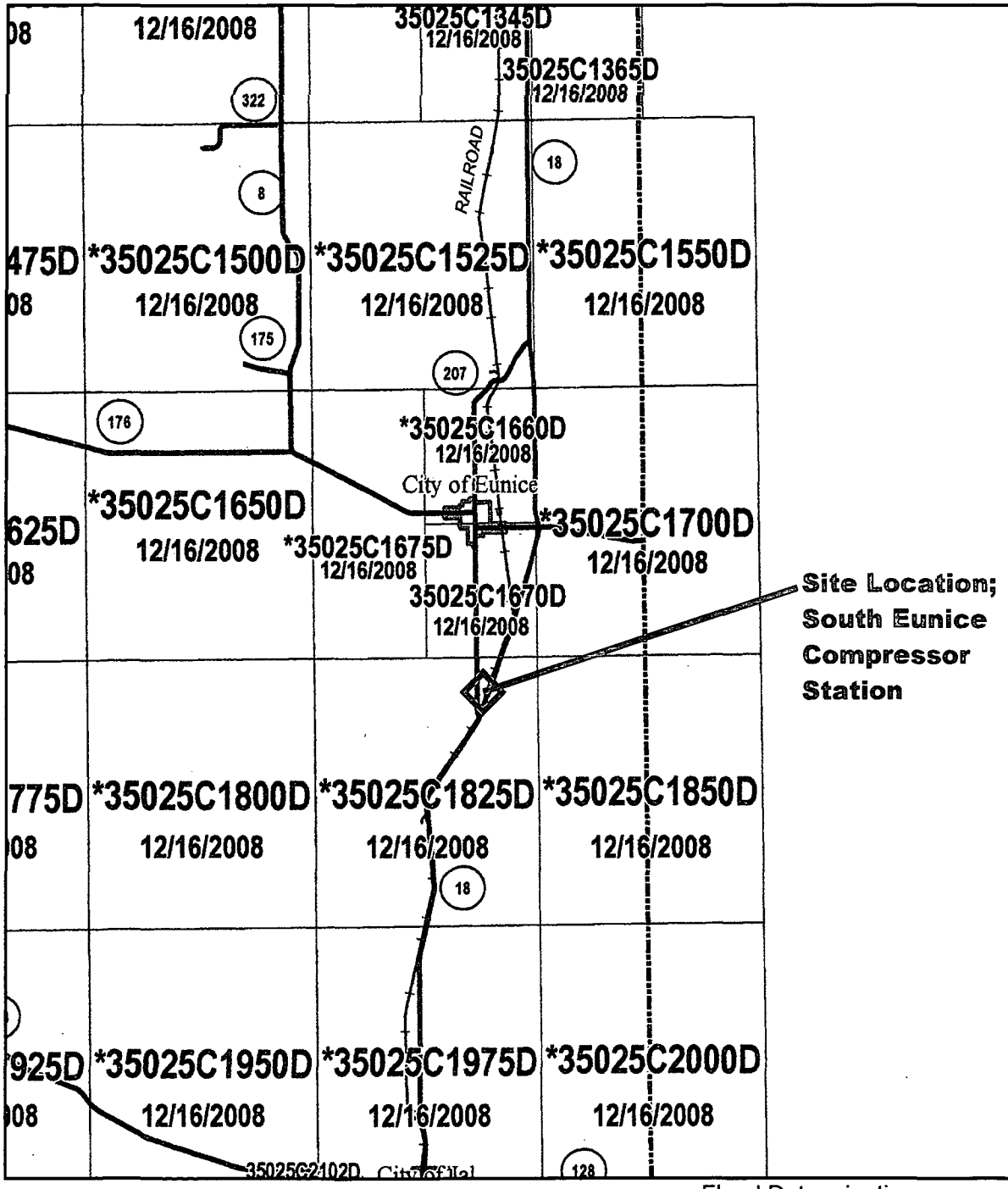
Land capability (nonirrigated): 7e
Ecological site: Sandy 12-17" PZ (R077DY046TX)

Typical profile

0 to 12 inches: Loamy fine sand
12 to 17 inches: Loamy fine sand
17 to 27 inches: Cemented material

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 9, Dec 9, 2008



NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

LEA COUNTY,
NEW MEXICO
AND INCORPORATED AREAS

MAP INDEX

PANELS PRINTED: 440, 445, 955, 965, 1165, 1170, 1200, 1335, 1345, 1355, 1365, 1670, 2102

MAP NUMBER
35025CIND0A

EFFECTIVE DATE
DECEMBER 16, 2008

Federal Emergency Management Agency

LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM PANEL DATE
EUNICE, CITY OF	350028	1660[1], 1670	August 30, 1974	August 22, 1978	December 16, 2008
HOBBS, CITY OF	350029	1165, 1170, 1335, 1345, 1350[1], 1355, 1365	April 2, 1976	July 16, 1991	December 16, 2008
JAL, CITY OF	350030	1975[1], 2102, 2110[1]	July 9, 1976	August 19, 1985	December 16, 2008
LOVINGTON, CITY OF	350031	955, 965	June 21, 1974	November 1, 1989	December 16, 2008
LEA COUNTY, UNINCORPORATED AREAS	350130	25[1], 50[1], 75[1], 100[1], 125[1], 150[1], 175[1], 200[1], 225[1], 250[1], 275[1], 300[1], 325[1], 350[1], 375[1], 400[1], 425[1], 440, 445, 450[1], 475[1], 500[1], 525[1], 550[1], 575[1], 600[1], 625[1], 650[1], 675[1], 700[1], 725[1], 750[1], 775[1], 800[1], 825[1], 850[1], 875[1], 900[1], 925[1], 950[1], 955, 965, 975[1], 1000[1], 1025[1], 1050[1], 1075[1], 1100[1], 1125[1], 1150[1], 1165, 1170, 1175[1], 1200, 1225[1], 1250[1], 1275[1], 1300[1], 1325[1], 1335, 1345, 1350[1], 1355, 1365, 1400[1], 1425[1], 1450[1], 1475[1], 1500[1], 1525[1], 1550[1], 1575[1], 1600[1], 1625[1], 1650[1], 1660[1], 1670, 1675[1], 1700[1], 1725[1], 1750[1], 1775[1], 1800[1], 1825[1], 1850[1], 1875[1], 1900[1], 1925[1], 1950[1], 1975[1], 2000[1], 2025[1], 2050[1], 2075[1], 2100[1], 2102, 2105[1], 2110[1], 2125[1], 2150[1]	December 16, 2008	December 16, 2008	December 16, 2008
TATUM, TOWN OF	350032	440, 445, 625[1]	June 21, 1974	July 1, 1988	December 16, 2008

[1] PANEL NOT PRINTED - ALL ZONE D

Facility Located in Panel 1825

MAP REPOSITORIES

(Map available for reference only, not for distribution.)

EUNICE, CITY OF:
1106 Avenue J
Eunice, New Mexico 88231

HOBBS, CITY OF:
City Hall
300 North Turner
Hobbs, New Mexico 88240

JAL, CITY OF:
523 Main Street
Jal, New Mexico 88252

LOVINGTON, CITY OF:
City Hall
214 South Love Street
Lovington, New Mexico 88260

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM
FLOOD INSURANCE RATE MAP

LEA COUNTY,
NEW MEXICO
AND INCORPORATED AREAS

MAP INDEX
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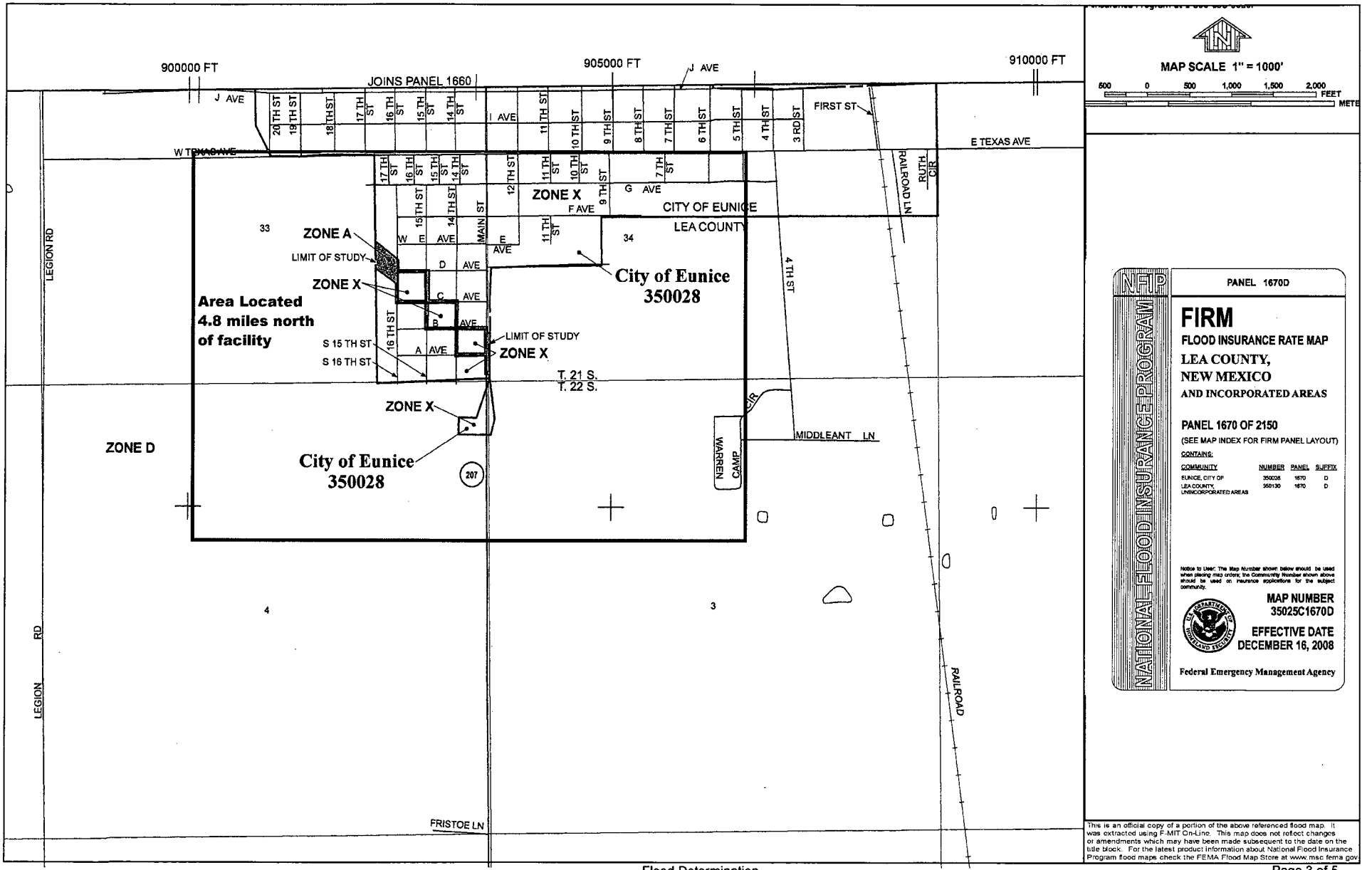
DECEMBER 16, 2008

Federal Emergency Management Agency



This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Areas to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

MAP SCALE 1" = 1000'

500 0 500 1,000 1,500 2,000 FEET

METE

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1670D

FIRM

FLOOD INSURANCE RATE MAP

LEA COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 1670 OF 2150

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EUNICE, CITY OF	350028	1670	D
LEA COUNTY, UNINCORPORATED AREAS	350130	1670	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 35025C1670D

EFFECTIVE DATE DECEMBER 16, 2008

Federal Emergency Management Agency

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4275000mE — 1000-meter Universal Transverse Mercator grid ticks, zone 13
- 6000000 FT — 5000-foot grid values: New Mexico State Plane coordinate system, East Zone (FIPSZONE = 3001), Transverse Mercator
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
December 16, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

MAP SCALE 1" = 1000'

500 0 500 1,000 1,500 2,000 FEET METE

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1670D

FIRM

FLOOD INSURANCE RATE MAP

LEA COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 1670 OF 2150

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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MAP NUMBER
35025C1670D

EFFECTIVE DATE
DECEMBER 16, 2008

Federal Emergency Management Agency

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

May 24, 2006

Mr. Cal Wrangham
Environmental, Safety and Health Advisor
TARGA Resources, Inc.
6 Desta Drive, Suite 3300
Midland, Texas 79705

Re: Discharge Permit GW-344
Eunice-South Compressor Station

Dear Mr. Wrangham:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the TARGA Resources, Inc., (owner/operator) Eunice-South Compressor Station (GW-344) located in the SW/4 of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/cc
Attachments-1
xc: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT
TARGA RESOURCES, INC., EUNICE-SOUTH COMPRESSOR STATION (GW-344)
DISCHARGE PERMIT APPROVAL CONDITIONS
May 24, 2006

Please remit a check for $1700.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. However, the owner/operator still owes the required $1700.00 renewal permit fee for a compressor station.

2. **Permit Expiration and Renewal:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on July 12, 2011** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its October 31, 2005 discharge permit renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3109.G NMAC addresses possible future modifications of a permit. Pursuant WQCC Regulation 20.6.2.3107.C NMAC, the owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. Pursuant to WQCC Regulation 20.6.2.3109.E NMAC, the Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of

withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. **Above Ground Tanks:** The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. **Labeling:** The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. **Below-Grade Tanks/Sumps and Pits/Ponds.**

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall

retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

A. The owner/operator shall correct the following site conditions subsequent to the OCD inspection (see attachment) of January 31, 2006:
   a. Construct secondary containment around chemical tanks;
   b. Close out-of-service brine pond containing brine water; and
   c. Remove and properly dispose and/or treat all oil stained dirt, weeds, etc. within oil treater areas, etc. inside berms.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***An unauthorized discharge is a violation of this permit.***

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. This facility

is currently under a discharge plan (GW-003) known as the former Texaco Eunice-South Gas Plant. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions:

A. **Gas Plant De-Commission Plan:** The plan shall consist of a detailed description of how the old gas plant will be de-commissioned in order to protect public health, fresh water and the environment.

B. **Waste Management Plan:** The plan shall address how oil field products and wastes will be properly handled, stored, and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect public health, fresh water and the environment.

21. Transfer of Discharge Permit: The owner/operator shall notify the OCD prior to any transfer of ownership, control or possession of a facility with an approved discharge permit. The purchaser shall submit a written commitment to comply with the terms and conditions of the previously approved discharge permit and shall seek OCD approval prior to transfer.

22. Closure: The owner/operator shall notify the OCD when operations of the facility are to be discontinued for a period in excess of six months. Prior to closure of the facility, the operator shall submit a closure plan for approval. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Certification: TARGA Resources, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained herein. **TARGA Resources, Inc.**, further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: **TARGA Resources, Inc.**

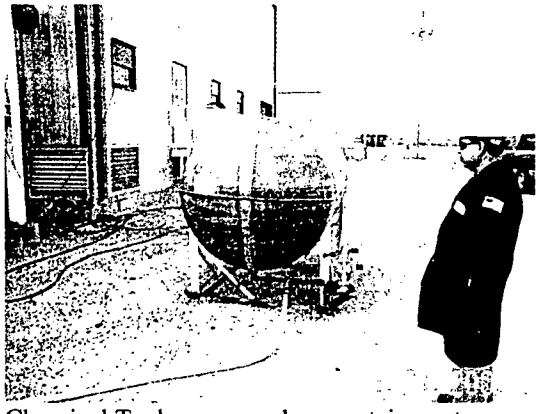
Clark White
Company Representative- print name

Clark White
Company Representative- signature

Date 5/31/06

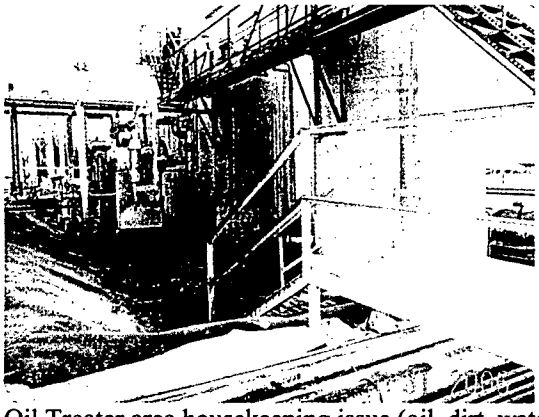
Title VP + Region Manager

OCD Discharge Plan Inspection: Targa (Old Dynegy) GW-344 Eunice South Comp. ST
1/31/06 OCD Inspectors: WPrice, CChavez, DSanchez

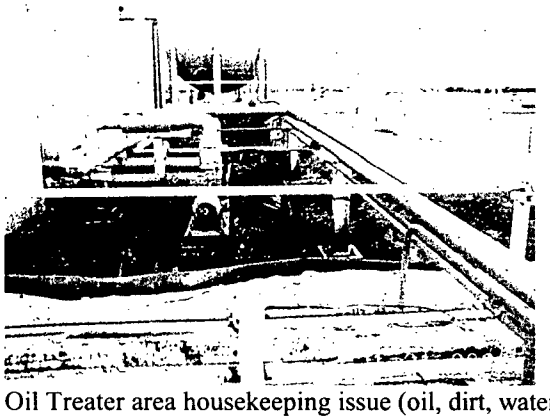


Chemical Tank-no secondary containment

Class II injection well and brine pond (out-of-service) to right of this picture contained brine water



Oil Treater area housekeeping issue (oil, dirt, water observed inside of berm) and poses a possible fire hazard



Oil Treater area housekeeping issue (oil, dirt, water, tumbleweeds, observed inside of berm) and poses a possible fire hazard

OCD ENVIRONMENTAL BUREAU

SITE INSPECTION SHEET

DATE: 1/31/06 Time: 4:20

Type of Facility: Refinery ☐ Gas Plant ☐ Compressor St. ☑ Brine St. ☐ Oilfield Service Co. ☐
Surface Waste Mgt. Facility ☐ E&P Site ☐ Crude Oil Pump Station ☐
Other ☐_____

Discharge Plan No ☐ Yes ☑ GW#_____

FACILITY NAME: EUNICE SOUTH COMP. ST

PHYSICAL LOCATION: _____

Legal: QTR___QTR___ Sec___ TS___ R___ County_____

OWNER/OPERATOR (NAME) _____

Contact Person: _____ Tele:# _____

MAILING ADDRESS: _____ State_____ ZIP_____

Owner/Operator Rep's:

_____

_____

OCD INSPECTORS:_____

1. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

~~DRUMS NEED TO BE VENTED?~~ NON-ISSUE

2. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

3. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

CHEMICAL TANK - NEEDS SECONDARY CONTAINMENT
TEMPORARY TANK FOR OVERHAUL!

CONDENSATE TANK AREA OIL/WATER/TRASH IN SECONDARY CONTAINMENT

4. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

5. Labeling: All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

NO LABEL ON CHEMICAL TANK (TEMPORARY TANK)

6. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

5 ENGINE ROOM SUMP (OIL NOTED ON SUMP FLOOR)

7. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

8. Onsite/Offsite Waste Disposal and Storage Practices: Are all wastes properly characterized and disposed of correctly?

Does the facility have an EPA hazardous waste number? _____ Yes _____ No

ARE ALL WASTE CHARACTERIZED AND DISPOSED OF PROPERLY? YES NO IF NO DETAIL BELOW.

_____

_____

_____

_____

_____

_____

9. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. All Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Closure of Class V wells must be in accordance with a plan approved by the Division's Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, the environment and groundwater as defined by the WQCC, and are cost effective. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

ANY CLASS V WELLS NO ☐ YES ☐ IF YES DESCRIBE BELOW ! Undetermined ☐

_____

_____

10. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

_____

_____

_____

_____

11. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the proper OCD District Office.

_____

_____

_____

12. Does the facility have any other potential environmental concerns/issues?

13. Does the facility have any other environmental permits - i.e. SPCC, Stormwater Plan, etc.?

14. ANY WATER WELLS ON SITE? NO ☐ YES ☐ IF YES, HOW IS IT BEING USED ?

15. Documents reviewed:

Miscellaneous Comments:

DE-CANT FLUIDS OUT of POND – 30 DAY CLOSURE PLAN

Photos taken: _____

Documents Reviewed/Collected: _____

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

May 24, 2006

Mr. Cal Wrangham
Environmental, Safety and Health Advisor
TARGA Resources, Inc.
6 Desta Drive, Suite 3300
Midland, Texas 79705

Re: Discharge Permit GW-344
Eunice-South Compressor Station

Dear Mr. Wrangham:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the TARGA Resources, Inc., (owner/operator) Eunice-South Compressor Station (GW-344) located in the SW/4 of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/cc
Attachments-1
xc: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT
TARGA RESOURCES, INC., EUNICE-SOUTH COMPRESSOR STATION (GW-344)
DISCHARGE PERMIT APPROVAL CONDITIONS
May 24, 2006

Please remit a check for $1700.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
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1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. However, the owner/operator still owes the required $1700.00 renewal permit fee for a compressor station.

2. **Permit Expiration and Renewal:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on July 12, 2011** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its October 31, 2005 discharge permit renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3109.G NMAC addresses possible future modifications of a permit. Pursuant WQCC Regulation 20.6.2.3107.C NMAC, the owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. Pursuant to WQCC Regulation 20.6.2.3109.E NMAC, the Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of

withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. Waste Disposal and Storage: The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. OCD Rule 712 Waste: Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. Waste Storage: The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. Drum Storage: The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. Process, Maintenance and Yard Areas: The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall

retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

A. The owner/operator shall correct the following site conditions subsequent to the OCD inspection (see attachment) of January 31, 2006:
   a. Construct secondary containment around chemical tanks;
   b. Close out-of-service brine pond containing brine water; and
   c. Remove and properly dispose and/or treat all oil stained dirt, weeds, etc. within oil treater areas, etc. inside berms.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***An unauthorized discharge is a violation of this permit.***

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. This facility

is currently under a discharge plan (GW-003) known as the former Texaco Eunice-South Gas Plant. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions:

A. **Gas Plant De-Commission Plan:** The plan shall consist of a detailed description of how the old gas plant will be de-commissioned in order to protect public health, fresh water and the environment.

B. **Waste Management Plan:** The plan shall address how oil field products and wastes will be properly handled, stored, and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect public health, fresh water and the environment.

21. Transfer of Discharge Permit: The owner/operator shall notify the OCD prior to any transfer of ownership, control or possession of a facility with an approved discharge permit. The purchaser shall submit a written commitment to comply with the terms and conditions of the previously approved discharge permit and shall seek OCD approval prior to transfer.

22. Closure: The owner/operator shall notify the OCD when operations of the facility are to be discontinued for a period in excess of six months. Prior to closure of the facility, the operator shall submit a closure plan for approval. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

23. Certification: TARGA Resources, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained herein. **TARGA Resources, Inc.**, further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

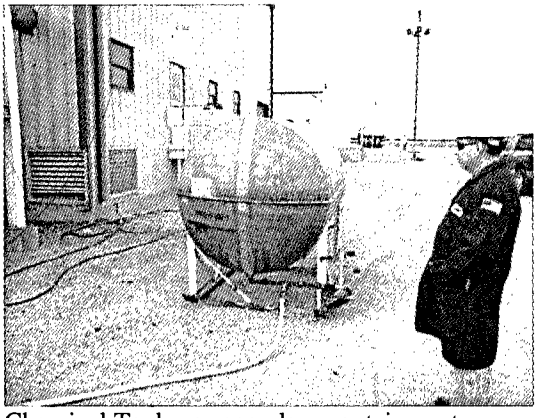
Conditions accepted by: **TARGA Resources, Inc.**

_____
Company Representative- print name

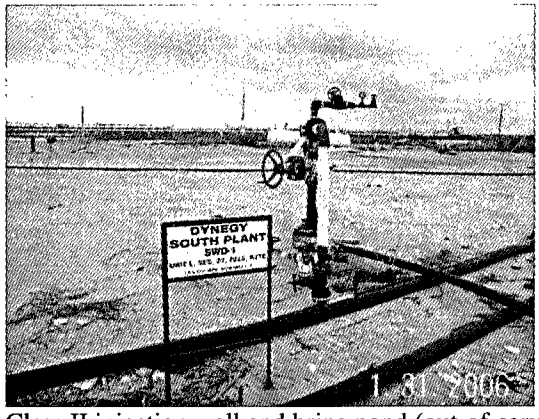
_____ Date_____
Company Representative- signature

Title_____

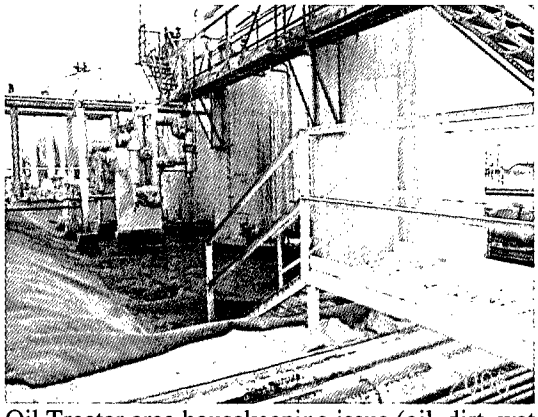
OCD Discharge Plan Inspection: Targa (Old Dynegy) GW-344 Eunice South Comp. ST
1/31/06 OCD Inspectors: WPrice, CChavez, DSanchez



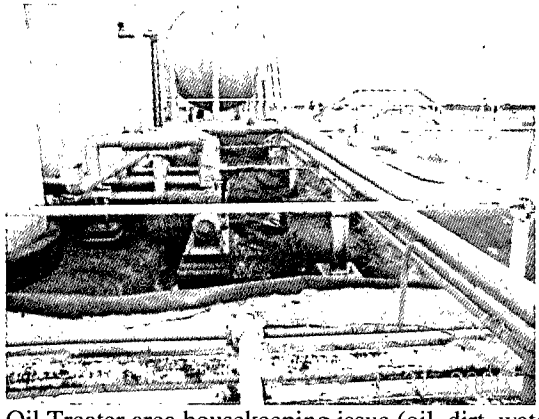
Chemical Tank-no secondary containment



Class II injection well and brine pond (out-of-service) to right of this picture contained brine water



Oil Treater area housekeeping issue (oil, dirt, water observed inside of berm) and poses a possible fire hazard



Oil Treater area housekeeping issue (oil, dirt, water, tumbleweeds, observed inside of berm) and poses a possible fire hazard

Targa Midstream Services Limited Partnership

6 Desta Dr., Suite 3300
Midland, Texas 79705
432-688-0555
www.targaresources.com

December 12, 2005

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, New Mexico 87505

Discharge Plan GW-344 Renewal
South Eunice Compressor Station

Dear Mr. Anderson:

Targa Midstream Services L P (formerly Dynegy) would like to renew the South Eunice Compressor Station Discharge Plan as required by WQCC Sec. 3106. Since the last renewal much of the compression has been permanently shutdown. The combined horsepower is now 5,300.

Please find the attached:
1) The renewal form and a check in the amount of $100.00, which constitutes our filing fee for the Discharge Plan renewal.
2) A copy of the Discharge Plan reflecting the operator name change from Dynegy to Targa.

Please call me with any questions, Office (432) 688-0542 Cellular (432) 425-7072.

Sincerely,

Cal Wrangham
Permian Basin Region ES&H Advisor

Cc: Chris Williams, OCD Hobbs District Office with attachments

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS. REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☐ Modification

1. Type: South Eunice Compressor Station
2. Operator: Targa Midstream Services L P

   Address: PO Box 1909 Eunice, NM 88231

   Contact Person: Cal Wrangham Phone: (915) 688-0542
3. Location: SW /4 SW /4 Section 27 Township 22 South Range 37 East
   Submit large-scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site. **See in attached Discharge Plan**
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility. **See on file at OCD**
6. Attach a description of all materials stored or used at the facility. **See on file at OCD**
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of wastewater must be included. **See on file at OCD**
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures. **See on file at OCD**
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems. **See on file at OCD**
10. Attach a routine inspection and maintenance plan to ensure permit compliance. **See on file at OCD**
11. Attach a contingency plan for reporting and clean-up of spills or releases. **See on file at OCD**
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included. **See on file at OCD**
12. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders. **See on file at OCD**

14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Cal Wrangham Title: ES&H Specialist

Signature: Cal Wrangham Date: December 12, 2005

E-mail Address: cwrangham@targaresources.com

TARGA MIDSTREAM SERVICES L P

DISCHARGE PLAN GW-344

SOUTH EUNICE
COMPRESSOR STATION

SECTION 1 - TYPE OF OPERATION

The Following is the South Eunice Compressor Station Discharge Plan and is in accordance with part 3100 of the State of New Mexico Water Quality Control Commission Regulations. The facility is a compressor station operating 5,300 horsepower.

This Plan provides information regarding any potential discharges onto or below the surface of the ground.

SECTION 2 – NAME OF OPERATOR

Targa Midstream Services L P operates the facility. The corporate office is located at 1000 Louisiana St. Ste. 4700 Houston, TX 77002. The Region office is located at 6 Desta Dr. Ste. 3300, Midland, TX. 79705.
The local Eunice Plant address and phone number is:
Targa Midstream Services L P
P.O. Box 1909
Eunice, NM 88231
(505) 394-2534

The local contacts are the Area Manager or Team Advisor, both office at the Eunice Plant (505) 394-2534 and the Region ES&H Advisor at (432) 688-0542.

SECTION 3 – LOCATION OF DISCHARGE PLAN FACILITY

The facility is located approximately 5 miles south of the city of Eunice, New Mexico. The legal description is SW ¼, SW ¼ of Section 27, Township 22 South, Range 37 East, Lea County, New Mexico.

SECTION 4 – LANDOWNERS

Versado Gas Processors, L. L. C. owns the South Eunice Compressor Station and is the landowner of record.

SECTION 5 – FACILITY DISCRIPTION

The South Eunice Compressor Station simply compresses raw field inlet gas (green gas) utilizing natural gas fueled engines driving compressors. The compressed gas is transported via pipeline to the Eunice Gas Processing Plant.

SECTION 6 – SOURCES OF EFFLUENT AND WASTE SOLIDS

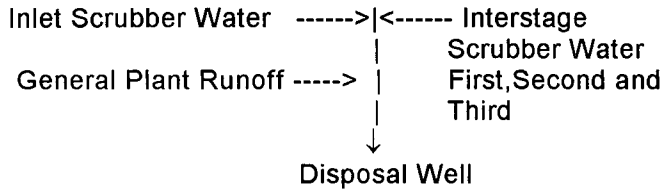
GENERATED AT THE FACILITY

The stages of compression use scrubbers to capture liquids that are separated from the gas stream. These hydrocarbons are trucked from the facility.

All Compressor Station wastewaters disposed of on site via the Disposal Well. The well is permitted API # 30 25 21479 order # 29.

The Waste Management Section of this Plan (Section 8) further describes waste materials and the disposal methods for each stream generated at the South Eunice Compressor Station.

WASTE WATER DISCHARGE SOUTH EUNICE COMPRESSOR STATION



Note: In the event of any emergency shutdown of the Injection Well, wastewater would be hauled from the station by truck and delivered to an alternate, state approved SWD well.

Accidental Spill: Procedures in the Spill Control and Countermeasure Plan Section of this plan would take effect.

Underground Wastewater Lines:

The wastewater drain system that is in service will be tested to demonstrate mechanical integrity. The test procedures will follow the approval conditions procedures

SECTION 7 – HYDROLOGIC & GEOLOGIC DATA

Wastewater is removed from the South Eunice C S as described in Section 6.

Further hydrologic and/or geologic data will be researched at the request of the Oil Conservation Division.

SECTION 8 – WASTE MANAGEMENT PLAN

This Waste Management Plan has been developed to meet Corporate and governmental requirements concerning disposal of various operating materials at the end of its useful life.

SECTION 9 – SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

Targa personnel will follow the SPCC guidelines on spill/leak reporting. These guidelines will conform to the Water Quality Control Commission Section 1203 and to NMOCD Rule 116 for spill/leak reporting.

SECTION 10 – CLOSURE PLAN

CLOSURE PLAN-SOUTH EUNICE COMPRESSOR STATION
TARGA MIDSTREAM SERVICES L P
AS PART OF THE
DISCHARGE PLAN

Pursuant to WQCC 3:107.A.11, Targa will take all reasonable and necessary measures to prevent the exceedance of WQCC Section 3103 quality standards should Targa choose to permanently close the facility. Closure measures will include removal or closure in place of all underground piping and equipment. All tanks will be emptied. No potentially toxic materials or effluents will remain on the site. All potential sources of toxic pollutants will be inspected. Should contaminated soil be discovered, any necessary reporting under NMOCD Rule 116 and WQCC Section 1203 will be made and clean-up activities will commence. Post-closure maintenance and monitoring plans would not be necessary unless contamination is encountered.

Larson & Associates, Inc.
Environmental Consultants

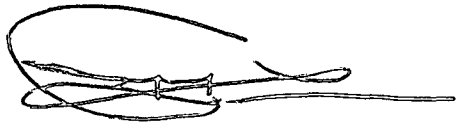
February 14, 2002

Mr. Roger C Anderson
Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Addendum to Groundwater Discharge Plan GW-344 - Storm Water Management Plan, Dynegy Midstream Services, L.P., Eunice South Plant Compressor Station, Unit Letter L, Section 27, Township 22 South, Range 37 East, Lea County, New Mexico

Dear Mr. Anderson:
Dynegy Midstream Services, L.P. (Dynegy) has retained Larson and Associates, Inc. (LA) to prepare a Storm Water Management Plan (SMP) for the Eunice South Plant Compressor Station (Site) located in Unit Letter L, Section 27, Township 22 South, Range 37 East, Lea County, New Mexico. The SMP is submitted as an addendum to groundwater discharge plan GW-344, and was requested by the New Mexico Oil Conservation Division (NMOCD) in correspondence to Dynegy dated July 12, 2001. The SMP was originally due to the NMOCD on December 31, 2001, however, an extension was granted until February 15, 2002.

Please call me at (915) 687-0901 if you have questions.
Sincerely,
Larson and Associates, Inc.



Mark J. Larson, CPG, CGWP
President

Encl.

cc: Mr. Cal Wrangham - Dynegy

ADDENDUM TO GROUNDWATER DISCHARGE PLAN GW-344
STORM WATER MANAGEMENT PLAN
DYNEGY MIDSTREAM SERVICES, L.P.
EUNICE SOUTH PLANT COMPRESSOR STATION

This Storm Water Management Plan (SMP) has been developed at the request of the New Mexico Oil Conservation Division (NMOCD) as a condition for renewal of the Groundwater Discharge Plan (GW-344) for the Dynegy Midstream Services, L.P. (Dynegy) Eunice South Plant Compressor Station (Site). The Site is located in Unit Letter L, Section 27, Township 22 South, Range 37 East, Lea County, New Mexico. Figure 1 presents a location and topographic map.

Operation Summary

In April 2000 the Eunice South Plant ceased operating as a natural gas processing plant, and is currently operated as a compressor station. The groundwater discharge plan was modified to include equipment associated with the compressor station, including two compressor engines (Engines #30 and #31), a pipeline pig launcher and suction scrubber, material and chemical storage areas, and drain system tank battery. Equipment associated with former gas processing activity is out-of-service, and Texaco Exploration and Production Inc. submitted a groundwater discharge plan to the New Mexico Oil Conservation Division (NMOCD) in 2001 for environmental remediation associated with the former gas plant. Figure 2 presents a Site location and topographic map. Appendix A presents Site photographs.

Secondary containment has been constructed at areas where materials and chemicals are stored that have the potential to contact the ground. The areas include:

- Above-ground storage tanks for condensate, gasoline and diesel fuel, and lube oil storage;
- Drain system tank battery; and
- Drum storage area.

Above-ground tanks are used to store condensate (210,000 gallons (2) and 12,600 gallons (1)), gasoline (2,016 gallons), diesel fuel (500 gallons), lube oil 4,200 gallons (3), 250 gallons (1), 8,820 gallons (1)), and naphtha (600 gallons). The condensate storage tanks are located near the southeast corner (2) and northeast corner (1) of the former process area. Earthen berms surround the tanks to contain product from spills, and storm water. Lube oil is stored in above-ground tanks situated inside concrete containment structures located northeast of Engine #30. The compressor engines are located inside buildings equipped with floor drains that collect drips. The floor drains flow to a sump located north of Engine #30. The sump is equipped with automated level controls, and a pump transfers fluid from the sump to a tank battery located southeast of the former process area. The tank battery is equipped with secondary containment that is lined to prevent subsurface intrusion of liquids from spills or storm water. Portable tanks that contain

gasoline and diesel fuel are positioned inside concrete containment structures located south of the former process area. The pig launcher and suction scrubber are located east of the former process area, and situated inside a concrete containment structure that is curbed to prevent storm water and spill runoff. Chemical drums and vessels are stored inside a containment structure constructed of concrete, and located east of Engine #30.

Strom Water Management Plan

Dynegy included a comprehensive Spill Prevention Control and Countermeasure (SPCC) Plan as an appendix to GW-344. The SPCC plan includes mechanisms to prevent potential non-point-source discharges of materials used or wastes generated at the facility, and control storm water. Secondary containment structures that have been installed at locations where equipment is operated or materials are stored to prevent accidental discharge of materials used or wastes generated at the facility. Earthen berms have also been constructed around aboveground storage tanks, as requirement by the groundwater discharge plan. Since the Site is no longer processes natural gas point-source contact by storm water is low. The suction scrubber is the only active piece of equipment, and is located inside secondary containment. The scrubber may remove only a small volume of liquid from the gas stream. The potential for storm water contact with the compressor engines is also very low since the engines are enclosed in buildings. There is a potential for storm water contact at the areas where materials and chemicals are stored. However, secondary containment structures designed to contain the contents of drums and storm water are in place. Oil or product collected in the secondary containment structures is absorbed with booms or other similar equipment, and disposed in a regulatory-accepted manner. Water from storm events that collects in the containment structures is allowed to evaporate or drained, unless hydrocarbons are present. Storm water containing hydrocarbons, based on visual identification of a sheen or floating layer, is picked up with a vacuum truck, and disposed in a regulatory-permitted manner.

FIGURES

TAKEN FROM U.S.G.S.
RATTLESNAKE CANYON, NEW MEXICO 1979
7.5' QUADRANGLES

SCALE: 1"=2000'

FIGURE #1

LEA COUNTY, NEW MEXICO

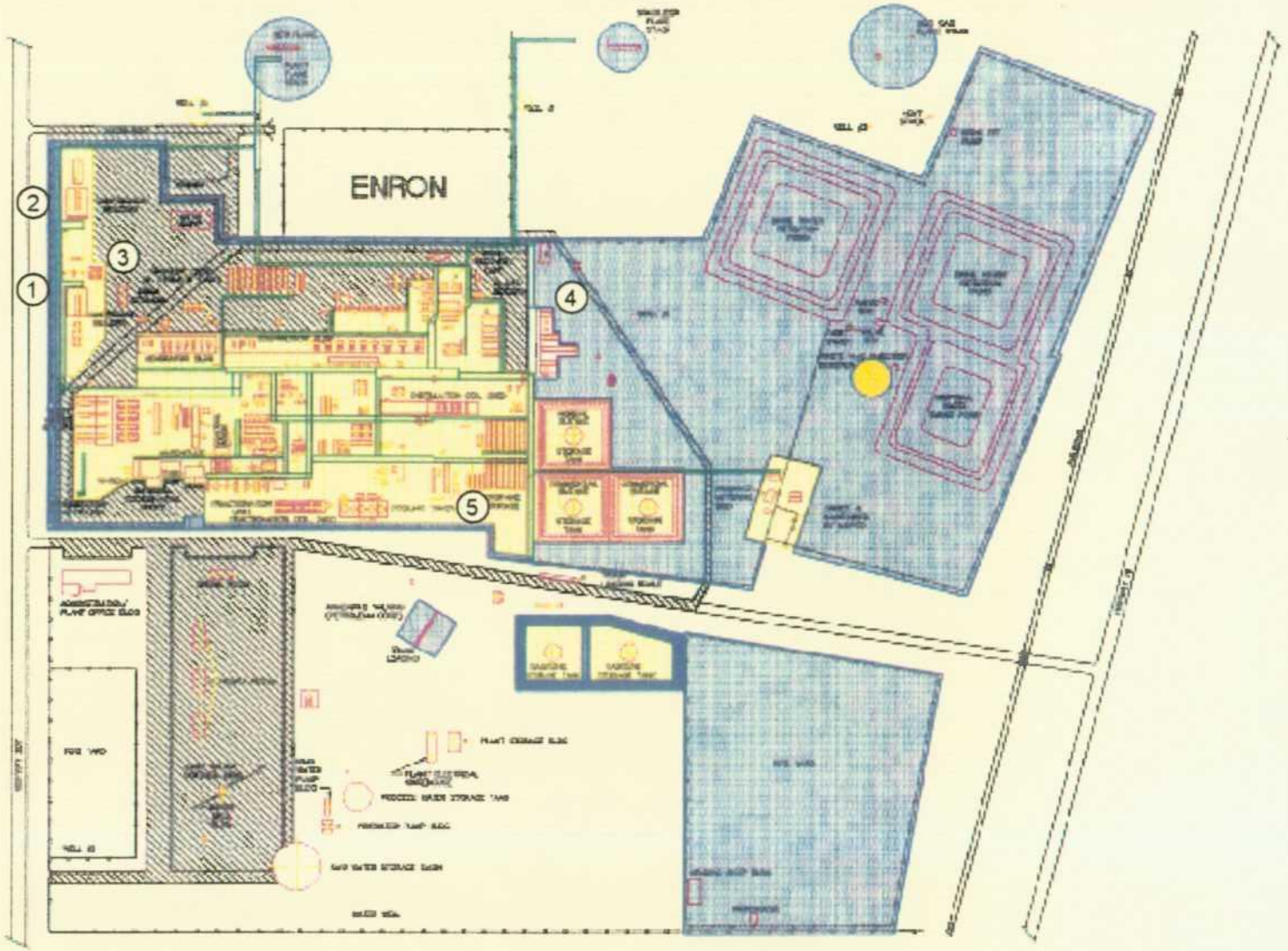
DYNEGY MIDSTREAM SERVICES, L.P.

EUNICE SOUTH COMPRESSOR STATION

LOCATION MAP

DATE: 2/11/02
NAME:
FILE: 1-0111

Larson & Associates, Inc.
Environmental Consultants



-N-

LEGEND

1. ENGINE 30
2. ENGINE 31
3. DRUM STORAGE
4. INLET GAS
5. TANK BATTERY

SCALE: 1"=100'

FIGURE #2

LEA COUNTY, NEW MEXICO

DYNEGY MIDSTREAM SERVICES, L.P.

EUNICE SOUTH COMPRESSOR STATION

SITE MAP

DATE: 2/11/02

NAME:

FILE: 1-0112

Larson & Associates, Inc.
Environmental Consultants

APPENDIX A

Photographs

1. Engine #30 Building

2. Engine #31 Building

3. Lube Oil Storage Northeast of Engine #30

4. Lube Oil Storage Northeast of Engine #30

5. Suction Scrubber and Pig Launcher (Northeast of Process Area)

6. Drain System Tank Battery (Southeast of Process Area)

7. Chemical Storage (East of Engine #30)

Dynegy Midstream Services, Limited Partnership
6 Desta Drive, Suite 3300
Midland, Texas 79705
Phone 915.688.0555 • Fax 915.688.0552

OIL CONSERVATION DIV.

01 AUG -7 PM 12:57

DYNEGY

August 1, 2001

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: GW-344
South Eunice Compressor Station
Discharge Plan Renewal

Dear Sir:
Please find attached a check ($100.00) for the discharge plan renewal fee and the signed approval conditions. I would like to thank you and your staff for the professional and courteous manner in which you have guided us through this process.

Please call with any questions or concerns. (915) 688-0542.

Sincerely,

Cal Wrangham
ES&H Advisor

Cc: Chris Williams/ OCD Hobbs

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. 0000518644 dated 7/31/01

or cash received on _____ in the amount of $ 100.00

from VERSADO GAS PROCESSORS, L.L.C.

for DYNEGY SOUTH EUNICE COMP. ST. GW-344

Submitted by: (Facility Name) WAYNE PRICE Data: (OCD No.) 8/20/01

Submitted to ASD by: _____ Data: 8/20/01

Received in ASD by: _____ Data: _____

Filing Fee ✓ New Facility ___ Renewal ___

Modification ___ Other _____ (specify)

Organization Code 521.07 Applicable FY 2002

To be deposited in the Water Quality Management Fund.

Full Payment ___ or Annual Increment ___

VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT. ■ CHECK BACKGROUND AREA CHANGES COLOR GRADUALLY FROM TOP TO BOTTOM.

ANTI-FRAUD PROTECTION - PATENTS 5,197,759, 5,

VERSADO GAS PROCESSORS, L.L.C.
1000 LOUISIANA, SUITE 5800
HOUSTON, TEXAS 77002-5050
(877)672-1449

BANK ONE, NA
CHICAGO, IL 60670

62-28
311
0934623

PAY One Hundred and NO/100 Dollars

CHECK NO.	CHECK DATE	PAY EXACTLY
0000518644	07 / 31 / 01	$*********100.00

Void After 90 Days

TO THE ORDER OF

Water Quality Management Fund
c/o Oil Conservation Division
1220 S St Francis Dr
Santa Fe NM 87505

VERSADO GAS PROCESSORS, L.L.C.

Robert D. Doty Jr.

VICE PRESIDENT - TREASURER
AUTHORIZED SIGNATURE

⑈0000518644⑈ ⑆031100283⑆ 09 34623⑈

ATTACHMENT TO THE DISCHARGE PLAN GW-344 APPROVAL
Dynegy Midstream Services, LP, Eunice South Plant Compressor Station
DISCHARGE PLAN APPROVAL CONDITIONS
July 12, 2001

1. Payment of Discharge Plan Fees: Please submit the $100.00 filing fee. Please make checks payable to: "The New Mexico Water Quality Management Fund"

2. Commitments: Dynegy Midstream Services, LP will abide by all commitments submitted in the discharge plan application dated April 20, 2001 including attachments, and these conditions for approval.

3. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

4. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

5. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

6. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

7. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

8. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must be tested to demonstrate their mechanical integrity no later than December 15, 2001 and every year from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating

pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD by December 31, 2001.

9. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than December 15, 2001 and every 5 years, from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD by December 31, 2001.

10. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

11. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices will be emptied of fluids within 48 hours of discovery. A record of inspections will be retained on site for a period of five years.

12. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Hobbs District Office.

13. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

14. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.

15. Storm Water Plan: Dynegy Midstream Services, LP will submit a stormwater run-off plan for OCD approval by December 31, 2001.

16. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

17. Gas Plant De-Commission Plan: Dynegy Midstream Services, LP will submit a plan for OCD approval by December 31, 2001. The plan shall describe in detail how the old gas plant will be de-commissioned in order to protect public health, fresh water and the environment.

18. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

19. Certification: **Dynegy Midstream Services, LP** by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. **Dynegy Midstream Services, LP** further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by: **Dynegy Midstream Services, LP**

Clark White
Company Representative- print name

Clark White Date 8/1/01
Company Representative- Sign

Title V.P. & Region Manager

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

July 12, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 6853

Mr. Cal Wrangham
Dynegy Midstream Services, LP
6 Desta Drive, Suite 3300
Midland, Texas 79705

RE: Discharge Plan GW-344
Dynegy Midstream Services, LP
Eunice South Plant Compressor Station
Lea County, New Mexico

Dear Mr. Wrangham:

The groundwater discharge plan GW-344 for the Dynegy Midstream Services, LP Eunice South Plant Compressor Station located in the SW/4 of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter.**

The discharge plan application dated April 20, 2001 including attachments, submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals.

The discharge plan is issued pursuant to Section 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Dynegy Midstream Services, LP of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does it relieve Dynegy Midstream Services, LP of its responsibility to comply with any other governmental authority's rules and regulations.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3104. of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C., Dynegy Midstream Services, LP is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire July 12, 2006** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 3106.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved.

The discharge plan application for the Dynegy Midstream Services, LP., Eunice South Plant Compressor Station is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan application will be assessed a fee equal to the filing fee of $100 plus a flat fee of $1700.00 for natural gas compressor stations with horsepower ratings greater than 1000 horsepower. The OCD has received the flat fee of $1700.00 but has not received the $100 filing fee.

If you have any questions, please contact Wayne Price of my staff at (505-476-3487). On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/lwp
Attachment-1
xc: OCD Hobbs Office

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Dynegy Midstream Services, LP, Eunice South Plant Compressor Station
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July 12, 2001

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Conditions accepted by: **Dynegy Midstream Services, LP**

_____
Company Representative- print name

_____ Date_____
Company Representative- Sign

Title_____