

GW -

79

**PERMITS,
RENEWALS,
& MODS**

Application

2002', 1998. 1992

HALLIBURTON

POST OFFICE BOX 960 • FARMINGTON, NM 87499

PHONE 505.324.3500 • FAX 505.327.2534

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2088 2040 South Pacheco
Santa Fe, NM 87501

August 28, 2002

RECEIVED

SEP 04 2002

**Environmental Bureau
Oil Conservation Division**

Attn: Jack Ford

RE: GW-99 Discharge Plan
Farmington Service Facility

Dear Mr. Ford,

Attached to this letter are two copies of Halliburton's application for a Discharge Permit Renewal as per Sections 3106.F. and 20NMAC6.2.3114 of the WQCC Regulations. Another copy of the application has been sent to the Aztec Office.

Two checks are also included. One for the \$100 filing fee and one for \$1700 covering the flat fee for service companies.

If any questions arise I will be the contact.

Sincerely



Allen Rodrigue

cc: Kellie Skelton
File
NMOCD office, Aztec, NM

**Discharge Plan Application For Service Companies
Certification
Discharge Plan Application**

List of Attachments

- I. Facility Plot Plan**
- II. Stock Status Report of Chemical Products on site**
- III. Latest TCLP analysis of our washrack grit**
- IV. Monthly Facility Assessments (Tiered Inspections)**
- V. Stormwater Pollution Prevention Plan (Forthcoming)**
- VI. Spill Contingency Plan (Forthcoming)**
- VII. 1:100,000 scale map with a one mile radius**
- VIII. Subsurface Investigation**
- IX. Latest Radioactive Survey**

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 January 24, 2001

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 FACILITIES
AND CRUDE OIL PUMP STATIONS**

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

☐ New ☐ Renewal ☐ Modification

1. Type: _____ Oil Field Service Co. _____
2. Operator: _____ Halliburton Energy Services _____
Address: _____ 4109 East Main St. Farmington NM 87401 _____
Contact Person: _____ Allen Rodrigue _____ Phone: _____ 505-324-3504 _____
3. Location: _____ NW _____ /4 _____ NE _____ /4 Section _____ 1 _____ Township _____ 29N _____ Range _____ 13W _____
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. CERTIFICATION: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: _____ Allen Rodrigue _____ Title: _____ Facility Supervisor _____

Signature: _____ *Allen Rodrigue* _____ Date: _____ 8-28-2002 _____

DISCHARGE PLAN APPLICATION

Part 1. Type of Operation

Oil Field Service Facility

Part 2. Name of Operator or Legally Responsible Party and Local Representative

**Halliburton Energy Services
P.O. Box 960
Farmington, New Mexico 87499**

Local Contact: Mr. Allen Rodrigue (505) 324-3504

Part 3. Location of the Discharge Plan Facility

The Farmington Facility is located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico.

Part 4. Landowners

**Halliburton Energy Services, Inc.
5151 San Felipe
Houston, Texas 77056**

Part 5. Facility Description

The Farmington Halliburton Energy Services facility is located at 4109 E Main, Farmington, NM 87402. The primary services provided are hydraulic fracturing, cementing and acidizing oil and gas wells. Maintenance of trucks and oilfield service equipment, blending and loading of liquid and non-liquid chemicals and storage of these chemicals occurs at this facility. A description of these activities is provided below:

The facility layout is depicted in Attachment I.

Chemical Terminal (Labeled Chemical Terminal on Attachment I)

Hydrochloric acid is stored, in concentrated form, in a steel, rubber-lined enclosed tank. The tank is within a coated concrete secondary containment. Connections for loading of the acid are located within the secondary containment. Any spills occurring inside the containment are recovered, transferred to a storage tank and reused.

Additional chemical additives are stored in the acid additive drum storage area. Additives are stored in either DOT quality drums or portable containers. This area is curbed for secondary containment.

Acid is loaded onto Halliburton transports from an overhead line through a hatch on the top of the transport. The transport is located on a coated concrete loading bay during the loading process. The loading bay is equipped with a trough that leads directly to the chemical terminal secondary containment. Spills in the secondary containment area drain to a sump, is pumped into the acid return tank and reused.

A liquid gel concentrate is stored and loaded from this same area. The gel concentrate is a solution of gel in diesel. The gel concentrate is stored in an enclosed tank within secondary containment. Loading and mixing operations occur on the same loading bay as the acid. Sacks of gel are stored inside a warehouse prior to mixing. Also, certain drummed chemical additives for the gel concentrate system are stored in same warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed.

Cement Bulk Storage Area (Labeled as such on Attachment I)

Bulk cement and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement material warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed. Mixing and transferring of materials from the cement bulk plant to the truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk chemicals and additives.

Sand Bulk Plant Area (Attachment I)

All materials stored in this area are non-liquid, dry chemicals. Bulk sand and proppants are stored in fully enclosed storage vessels. Loading of the sand is done pneumatically. Unloading of the sand and proppants is done by gravity fed hoses into the top of the transport.

Maintenance Shop (Labeled Truck Shop on Attachment I)

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation and curbing that is self contained. Any spills in the shop area cannot escape the shop area are immediately cleaned and properly disposed. Three solvent based parts washers are located in the Maintenance shop area. Truck servicing is performed in the main shop. All used oil is collected in a used oil tank. The used oil tank is located on the east end outside of the shop with secondary containment being a tank within a tank. Inspections are performed daily and monthly with the monthly inspection documented. Used oil filters are drained at least 12 hours and placed in a drum and shipped to our TSDF and waste management facility in Duncan, OK and are ultimately recycled.

Wash Rack Area (Labeled Wash on Attachment I)

Truck and equipment washing is performed in this area. The building is roofed and walled on three sides. The structure is designed to capture overspray, wash water and grit. Each wash bay drains to a sump for grit separation. The sumps drain to a three stage oil/water separator, then to the sewer.

Adjacent to the wash rack is a concrete pad for drying washrack grit. The grit is removed from the sumps on a regular basis, placed on the drying slab, allowed to dry and sent to a land treatment facility. The drying slab is contained on three sides with concrete walls and a sloped concrete floor which allows for drying grit to be contained within the drying area. (South East Corner of Wash Bay, Attachment I)

Trucks and equipment are lubricated in the Grease Room in the Washrack area. Lubricants are stored in bulk storage tanks, drums and pails, all of which are within concrete secondary containment and are covered.

Drum Storage Area (Located directly between the Chemical Terminal and Tools on Attachment I)
The drum and portable container storage area is constructed with a paved floor and curbing for secondary containment. An inspection of this area is conducted and documented daily and monthly. Any spills or leaks in this area is cleaned and disposed of properly as they are discovered.

Truck and Equipment Parking Areas (Attachment I)
Oilfield service trucks and equipment are parked in the areas labeled on Attachment I.

Miscellaneous

In addition to the above, certain other waste management practices are followed. Trash containers are conveniently located throughout the facility and are regularly emptied by a waste management service. Paved surfaces are inspected and cleaned as required. Weeds and debris are removed as needed. Good housekeeping practices are adhered to at this facility.

Past Spills, Leaks and Storm water Runoff

There have been two significant spills at this location in the past 3 years. The first spill occurred on October 11, 2000 it was at the LGC plant where a valve was inadvertently left on during refilling process. There was approximately 200 gallons of diesel based LGC spilled. The spill was contained to the secondary containment. The spill was cleaned and disposed of at a approved facility. The second spill occurred on December 7, 2000 when a vendor inadvertently connected to the drain line instead of the acid fill line. Approximately 100 gallons of acid was lost to the city sewer. Immediate notifications and actions were taken to minimize impact. Additional actions have been taken to prevent reoccurrences of both incidents. Automated gates and locks have been added.

The facility is constructed such that all storm water runoff leaves the property at one point just south of the paint shop and denoted on Attachment I by the arrow pointing south. The facility receives significant storm water run-on from adjacent properties and roads on the north and west.

Part 6. Materials Stored or Used at the Facility

A complete list of chemical products utilized in servicing oil wells is included in this application as Attachment II.

Name	General Makeup or Specific Brand	Solid or Liquid	Type of Container	Estimated Volume Stored	Location
1. Drilling Fluids	None				
2. Brines (KCl, NaCl, etc.)	Weak NaCl	Solid	Bags	Neutralized HCl	Chemical Terminal
3. Acids/Caustics	Hydrochloric acid	Liquid	Tank	13,000 gal	Chemical Terminal
4. Detergents/Soaps	Howco Suds	Liquid	Drum	165 gal	Drum Area
	AQF II	Liquid	Drum	440 gal	Drum Area
	SSO 21MW	Liquid	Drum	660 gal	Drum Area
	Washrack Soap	Liquid	Drum	55 gal	Washrack Area
5. Solvents & Degreasers	Safety Kleen	Liquid	Drum	20 gal	Shop, Grease room
6. Paraffin Treatment/ Emulsion Breakers	Lo Surf	Liquid	Drum	275 gal	Drum Storage Area
7. Biocides	BE-6	Solid	Can	400 lbs	Cement Sand
	BE-3S	Solid	Can	40 lbs	Plant

Part 7. A. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

	Waste Type	Types of major effluent	Quantities (per month)	Major Additives
1.	Truck Wastes	Neutralized Acid Returns	2500 gal	NaCl
2.	Truck Washing	Wash Water Grit	65,000 gal 16 cu. yds	Soap
3.	Steam Cleaning	Not applicable		
4.	Solvent/Degreaser Use	Safety Kleen (Three Units)	60 gal	Oils and Greases
5.	Spent Acids	Hydrochloric Acid Returns (Unused)	2500 gal.	
6.	Waste Slop Oil	Not applicable		
7.	Used Lubricants and Oils	Lube Oil and Crankcase Oil	185 gal	None
8.	Oil Filters	From Trucks and Engines	54 filters	None
9.	Tank Solids and Sludges	Not applicable		
10.	Painting Wastes	Safety Kleen	20 gal	
11.	Sewage	Sanitary sewage commingled with Industrial waste water from truck washing operation	65,000 gal	Soap
12.	Laboratory Wastes	Water Samples Crude Oil Samples Cement Samples	5 gal 5 gal 20 lbs	
13.	Other waste liquids	Off-Spec, out of date chemicals	100 gal	
14.	Other waste solids	Off-Spec, out of date chemicals Used drums	2 drums 100 ct.	

7. B. Quality Characteristics

1. Truck Wastes

Unused acid is the only significant waste returning to the facility in trucks. The acid returns are neutralized to a pH greater than 2, with sodium bicarbonate or equivalent, while still in the transport. The material is then transferred to a holding tank within the secondary containment of the chemical terminal. This "salt" water is used for makeup water on subsequent acid blends.

2. Truck Washing

The external components of the trucks and equipment are washed with water and soap. The primary constituents of the washwater effluent is grit, hydraulic oils, water, etc. The washwater mixture passes through a three bay oil/water/grit separator. The separator is concrete with a chemical resistant liner. The oil is trapped, removed with a belt type oil skimmer and collected in a drum. The drummed oil is then transferred to the Used Oil tank which is within secondary containment. The used oil is removed periodically by a waste oil recycler and taken off-site.

The wash rack grit is sampled annually, utilizing a random grab sampling and compositing technique to ensure representative results. The composite sample is subjected to the Toxic Characteristic Leaching Procedure and for Corrosivity, Reactivity and Ignitibility. The results of the most recent test are included as Attachment III. The grit is removed periodically, dried on a designated grit drying bed. The grit is treated in a off-site commercial land treatment unit owned and operated by Enviro-Tech of Farmington, NM. The water travels to the local POTW through the sewer system.

3. Steam Cleaning Not Applicable

4. Solvent and Degreasers

Parts are washed in a parts washer using soap and water. Oil is separated from the waste water. The oil is disposed of in the waste oil tank and the water is recycled in the next wash cycle.

5. Spent Acids

Acid returns are brought back to the facility, neutralized and managed as described in 7.B.1

6. Waste Slop Oil Not Applicable

7. Used Lubricants and Oils

Lube oils, crankcase oils and other used oils generated at the facility are collected in a secondarily contained tank located outside the east end of the shop. The oils are removed by a waste oil recycler and hauled off-site. Management of these oils is as per 40 CFR 270.

8. Oil Filters

Oil filters generated at the facility are "hot-drained" for at least 12 hours, containerized and shipped by Halliburton truck to the TSDF in Duncan, OK. Once in Duncan, the filters, along with others, are shipped to a used oil filter recycler, through Specialty Environmental Services.

9. Tank Solids and Sludges Not Applicable

10. Painting Wastes

Painting wastes and related materials generated at the facility are managed/recycled by Safety-Kleen .

11. Sewage

Sewage from bathrooms and kitchens are commingled with wash rack water to the local POTW.

12. Laboratory Wastes

A small lab used for testing stimulation and completion products is located on the facility (see attachment). Wastes generated are primarily water with trace amounts of stimulation and completion chemicals, as well as other lab reagents. There are small amounts of waste water that enters the sewer to the local POTW but for the most part the waste is capture in a container and disposed of in the waste water tank located in the chemical storage area within secondary containment.

Oil samples are collected and either added to the used oil tank or shipped by company truck to the Halliburton TSDF in Duncan, OK for further management.

Cement retain samples are stored for a period of time and disposed of in the local landfill via the dumpster.

13. Other Liquid Wastes

Out of date or off-spec liquid chemical products are stored in a designated waste storage area located inside the southeast corner of the cement bulk plant warehouse. This storage area meets the requirements of 40 CFR 264 for small quantity generators. If the wastes are hazardous as per 40 CFR 261, they are managed accordingly. If nonhazardous, they are labeled as such, and stored in the same area. All chemical wastes generated at this facility are returned to the Duncan TSDF on company trucks, accompanied with a hazardous waste manifest within 180 days of being deemed waste.

14. Other Solid Wastes

Out of date or off-spec solid chemicals are labeled as either hazardous or non-hazardous, stored in the designated waste storage area and returned to the TSDF in Duncan, OK via company truck. Pallets are returned to the Duncan TSDF for reuse or recycle. Chemical sacks are emptied and placed into dumpsters on site and sent to local landfill as are cardboard and paper products.

Empty drums and pails are stored in a designated empty container storage area. The drums are stored on their sides with bungs in place and tight, positioned with bungs horizontal to the ground. All empty containers, 5 gals in volume or larger, are returned to the Duncan TSDF and then shipped off-site to a metal recycler, drum recycler or plastic recycler as appropriate. The drums are "RCRA empty" prior to storage.

Part 8. A. Summary of Existing Liquid and Solid Waste Collection and Disposal

	Waste Type	Tank(T)/ Drums(D)	Floor Drain(F) Sumps (S)	Offsite Disposal
1.	Truck Wastes	Neutralized Returned Acid	Sump to Tank	Reused in subsequent aci blends
2.	Truck Washing	Only Truck and Equipment Washing	(S)	Wastewater to POTW Grit to Landfill by Truck
3.	Steam Cleaning	Not applicable		
4.	Solvent/Degreaser Use	(D) Safety Kleen		Safety Kleen/truck
5.	Spent Acids	(T) Collected in tank at chemical terminal		Reused in acid blends
6.	Waste Slop Oil	Not applicable		
7.	Waste Lubrication and Motor Oils	(T)		Waste Oil Recovery Co. by Truck
8.	Oil Filters	(D)		Halliburton TSDF in Duncan OK by Co. Trucl
9.	Tank Solids and Sludges	Not applicable		
10.	Painting Wastes	(D)		Safety Kleen by Truck
11.	Sewage			POTW Sanitary Sewer
12.	Laboratory Wastes			POTW Sanitary Sewer
13.	Other Waste Liquids	Off-Spec, out of date chemicals		Halliburton TSDF in Duncan OK by Co. truck
14.	Other Waste Solids -	(S) Off-Spec, out of date chemicals (S) Empty drums		Halliburton TSDF in Duncan OK by Co. truck

8. B. Collection and Storage Systems

1. Sumps, Lines, Pits

Truck and equipment washing occurs in a wash rack with a concrete grit sump. The primary separation of the grit occurs in this sump. The water, oils, greases and suspended solids travel through an unpressurized concrete trough and piping system to an oil water separator prior to entering the local POTW system. The oil water separator is concrete with a chemical resistant coating installed to ensure integrity. The oil water separator is inspected annually for integrity. This inspection is documented utilizing the "Tiered Inspection" program. An example of the tiered inspection documentation is Attachment IV.

Sewer lines are not pressurized and no lift station exists internal to the facility.

2. Tankage and Chemical Storage Areas

Acid returns are neutralized on the transport and then released into a concrete, lined sump, pumped to a storage tank, stored for a short while, and reused in subsequent acid blends. The storage tank is within the secondary containment of the chemical terminal. This secondary containment is concrete with a chemical resistant coating. The dimensions of the containment, less the volume taken by two other tanks within the containment, yield a volume greater than 35,000 gallons. The largest tank within the containment is 13,000 gallons. This is in excess of the requirement for the containment to be 1.33 times the capacity of the largest tank within the containment. This containment area is visually inspected each workday for leaks, spills or other releases. The releases are collected and pumped to the acid return tank for reuse.

Used oils are collected in a steel tank that is within steel secondary containment. The volume of the containment is greater than 1.33 times the capacity of the tank.

Containerized chemical products, that become waste, are stored in a designated waste storage area within a covered building. The area is on concrete, secondarily contained and inspected at least weekly. The waste chemicals are stored for no more than 180 days before being shipped off-site to the Duncan, OK TSDF.

Solid chemicals that become waste are stored in the same designated waste storage area as the liquids. Compatibility concerns are recognized and precautions taken. The wastes are stored no longer than 180 days and are shipped off-site to the Duncan, OK TSDF.

Liquid chemical products are stored in a designated storage area that is paved, curbed and inspected at least weekly for spills, leaks, deteriorating containers, missing labels, etc.

All chemicals are received, stored and shipped in DOT approved containers.

8. C. Existing Effluent and Solids Disposal

1. On-Site Disposal

No on-site disposal of waste materials occurs at this facility. There are no surface impoundments, leach fields or injection wells on this facility.

Drying Beds, or Other Pits

The grit from the washrack is removed periodically and placed into a designated drying area. The area has three sides of concrete wall, with a sloped concrete floor to maintain grit within containment during the drying process.

2. Off-Site Disposal

Off-site disposal of each waste stream is noted in the Table 8.A

9. Proposed Modifications

There are no proposed modifications at this time.

10. Inspection, Maintenance and Reporting

A. Halliburton adheres to a tiered inspection program that causes areas of concern to be inspected on a daily, weekly, monthly or quarterly basis. Corrective actions are generated as a result of the inspections. An example of the tiered inspections is included as Attachment IV.

Below grade sumps with liners or secondary containment are inspected at least annually. These inspections occur by detecting liquids in the interstitial space or by emptying, cleaning and visual inspections of the integrity of the sump. If leaks from these units are discovered or the integrity of the unit is suspect, the New Mexico OCD Rule 116 is followed. A release in excess of 25 barrels will be reported both verbally and written in a timely manner. Releases in excess of 5 barrels but less than 25 barrels will be timely reported in a written report.

B. No groundwater monitoring occurs at this facility.

C. Precipitation that is collected within the secondary containment of the chemical terminal, the drum storage area and the liquid gel concentrate area is pumped into the acid return tank and utilized as makeup water for acid blends. Storm water or precipitation that is not captured leaves the property at one point on the south side of the facility. This facility has a current storm water pollution prevention plan as per 40 CFR 120. This plan is Attachment V.

11. Spill/Leak Prevention and Reporting Procedures

The spill/leak contingency plan is included as Attachment VI. Chemical storage, blending, loading and unloading occurs in contained areas. The containment areas are inspected with spills and leaks cleaned up. All bulk liquid storage tanks are located within secondary containment one and one third the volume of the capacity of the largest tank. Releases to containment are recovered and for reuse. The largest spill potential outside containment would come from a 330 gal portable container.

All effluent from the facility leaves the property at one point. A significant spill could be contained on the property by blocking this exit, allowing time to remediate the spill. Spill kits are strategically located around the facility. The spill kits contain absorbent material, absorbent pads, shovels, and certain PPE and other spill cleanup materials.

Certain liquid and solid chemical products used, stored, blended or loaded at the facility contain constituents listed in WQCC 3103, "Standards for Groundwater" and 1101 TT, definition of "Toxic Pollutants". Each of these chemicals are listed below with the concentration of the constituent, as well as, the storage and handling techniques that greatly reduce potential for a spill, leak or discharge.

<u>Listed Constituent</u>	<u>Product</u>	<u>% in Product</u>	<u>Storage</u>
Fluoride	Ammonium Fluoride	33	Drum Storage area
Radioactivity	Densometers	Survey attached*	In Warehouse
Toluene	Paint Products	varied	Gal cans/warehouse
Ethylbenzene	Losurf-259	1-5	Drum Storage area
Xylenes	Xylenes	95	Drum Storage area
	Losurf-259	4	Drum Storage area
	Losurf-300	2	Drum Storage area
	Brake Cleaner Aerosol	Unknown	16oz aerosol cans
Methylene Chloride	WS-44	2	Drum Storage
Naphthalenes	Losurf-300	less than 10	Drum Storage
	Hyflo IV	2	5 gal pail
Chlorides	Potassium Chloride	100	Sacks / warehouse
	HC-2	8.5	Drum Storage
	Hydrochloric acid	35	Secondary Contain.
	XL-1	40	5 gal pails
	Max Seal	0.15	Drum Storage
	Calcium Chloride	100	Sacks / warehouse
Copper	Cat-3	1.9	Drum Storage
Iron	XL-1	40	5 gal pails
Phenols	Super Sand	less than 0.1	Sand Coating / dry
"	Tempered Sand	less than 0.1	Sand Coating / dry

* See Attachment IX

12. Site Characteristics

1. Attachment VII. is a 1:100,00 map showing a radius of one mile around the facility. The bodies of water within that radius and the approximate distance from the facility is listed below:

<u>Water Body</u>	<u>Distance</u>	<u>Direction</u>
Animas River	0.6 miles	Southeast
Hood Arroyo	0.85 miles	East
Echo Ditch	0.85 miles	South

2. A subsurface investigation was conducted in 1975. The report is included as Attachment VIII.

3. The investigation shows the soil types, conductivity and other subsurface information for this site.

4. This facility receives storm water run-on from the north. Diversions have been addressed by the city. The street to the north, Gila Street was upgraded; straightened and drains added to minimize the impact to the parking areas of the facility. There was also a cinder block wall installed parallel with Gila street to assist in diverting the storm water to the drain system. At the entrance to the yard the hump was made a little larger to hold the water back so that it may enter the drain system. If there were to be a major rain event the water would still enter and drain through the yard as previously described.

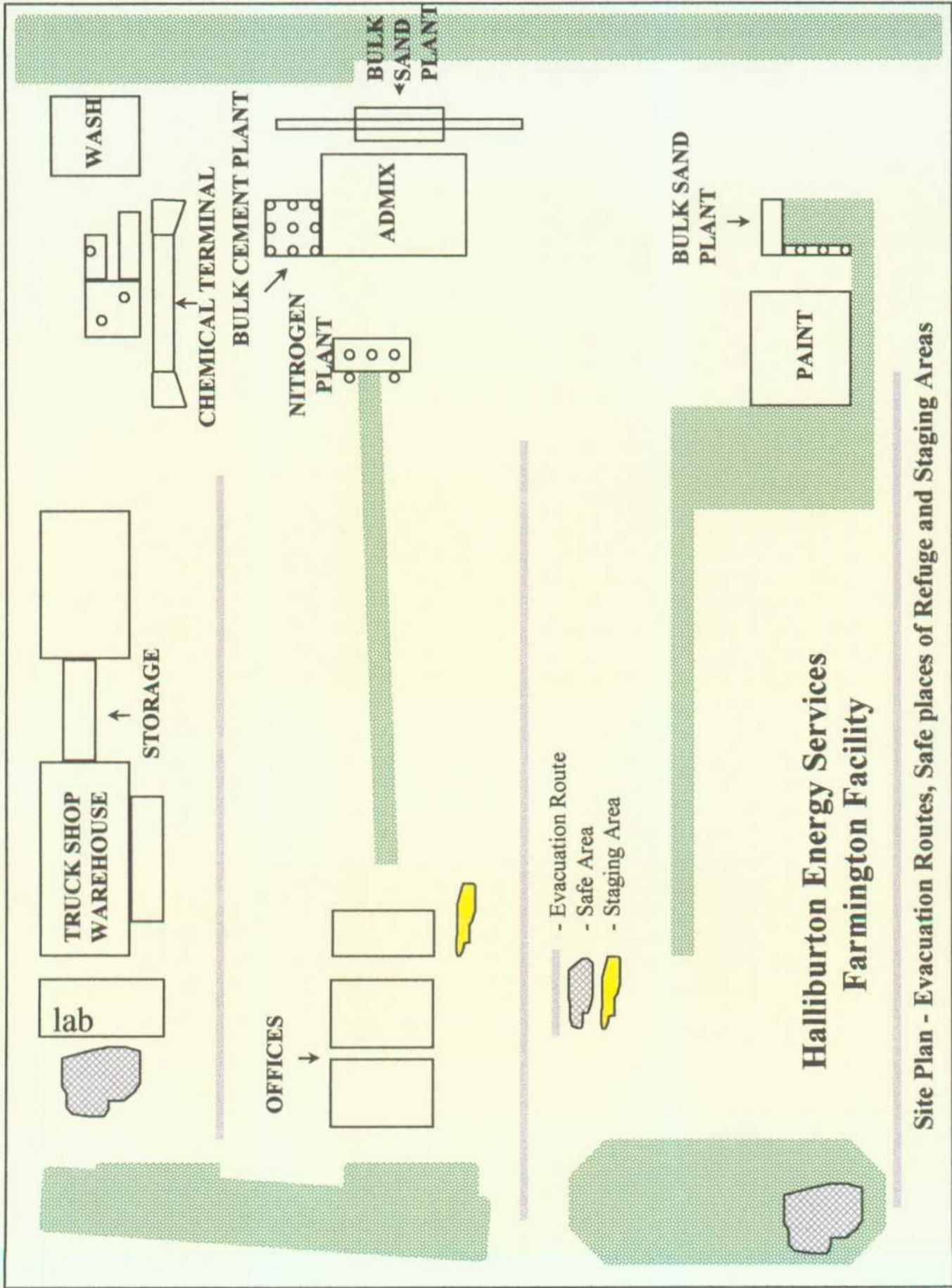
13. Other Compliance Information

1. NMOCD Rule 116 and WQCC Section 1203 have been incorporated into the facility contingency plan.

2. A closure plan for this facility is not required.

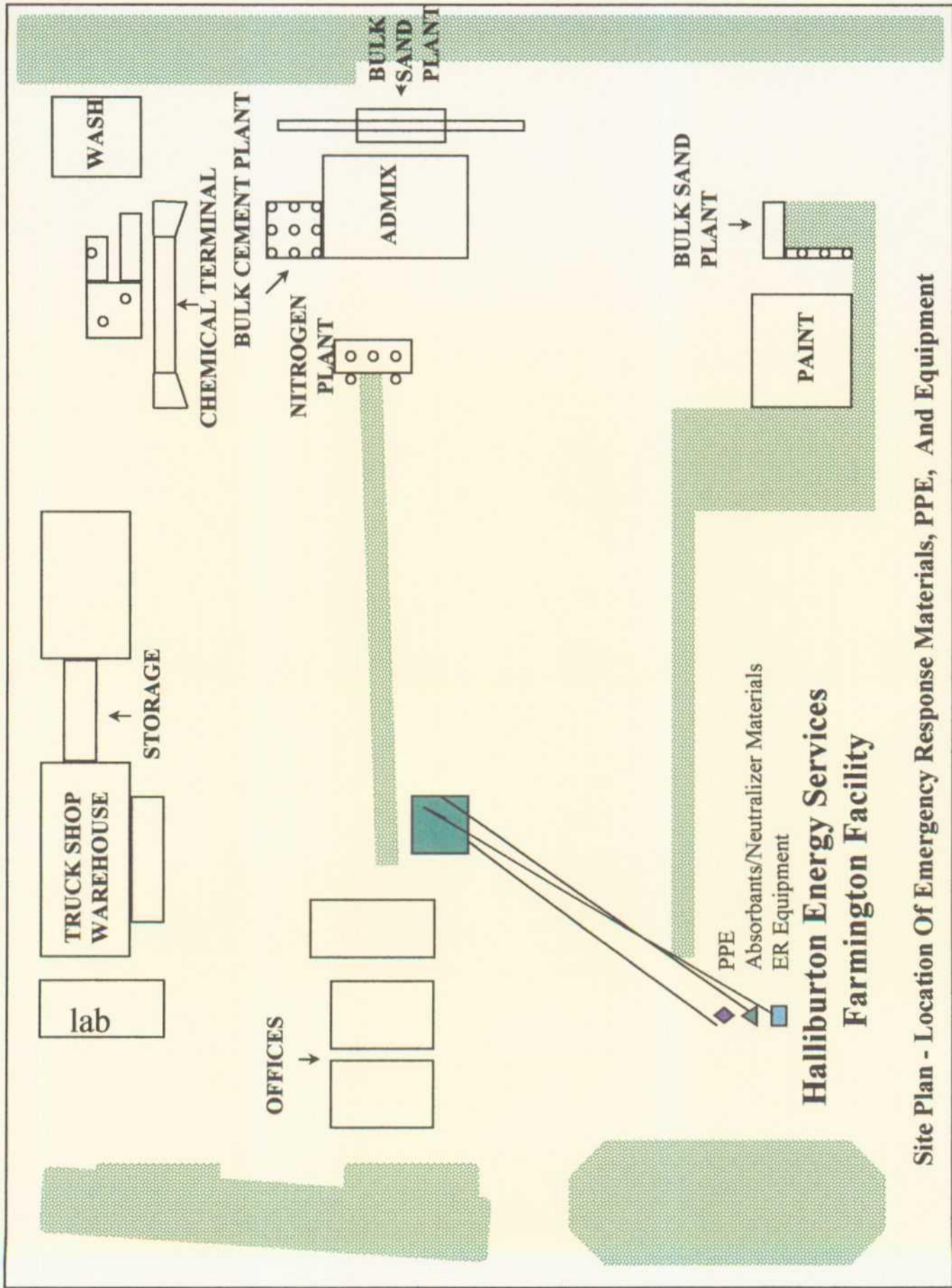
ATTACHMENT I

FACILITY PLOT PLAN SHOWING LOCATIONS OF BUILDINGS AND PROCESS AREAS AND DIRECTION OF STORMWATER FLOW

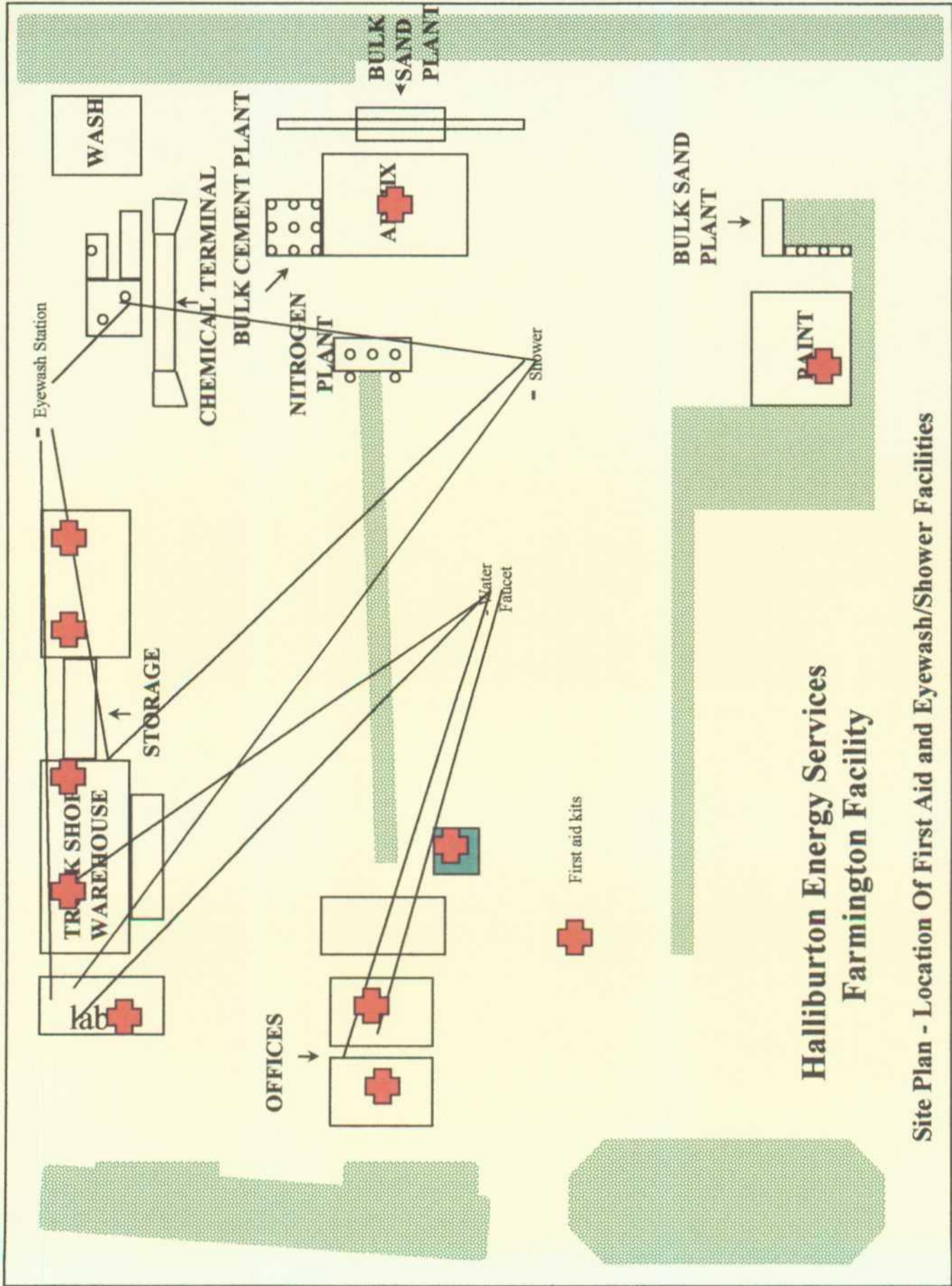


Halliburton Energy Services Farmington Facility

Site Plan - Evacuation Routes, Safe places of Refuge and Staging Areas



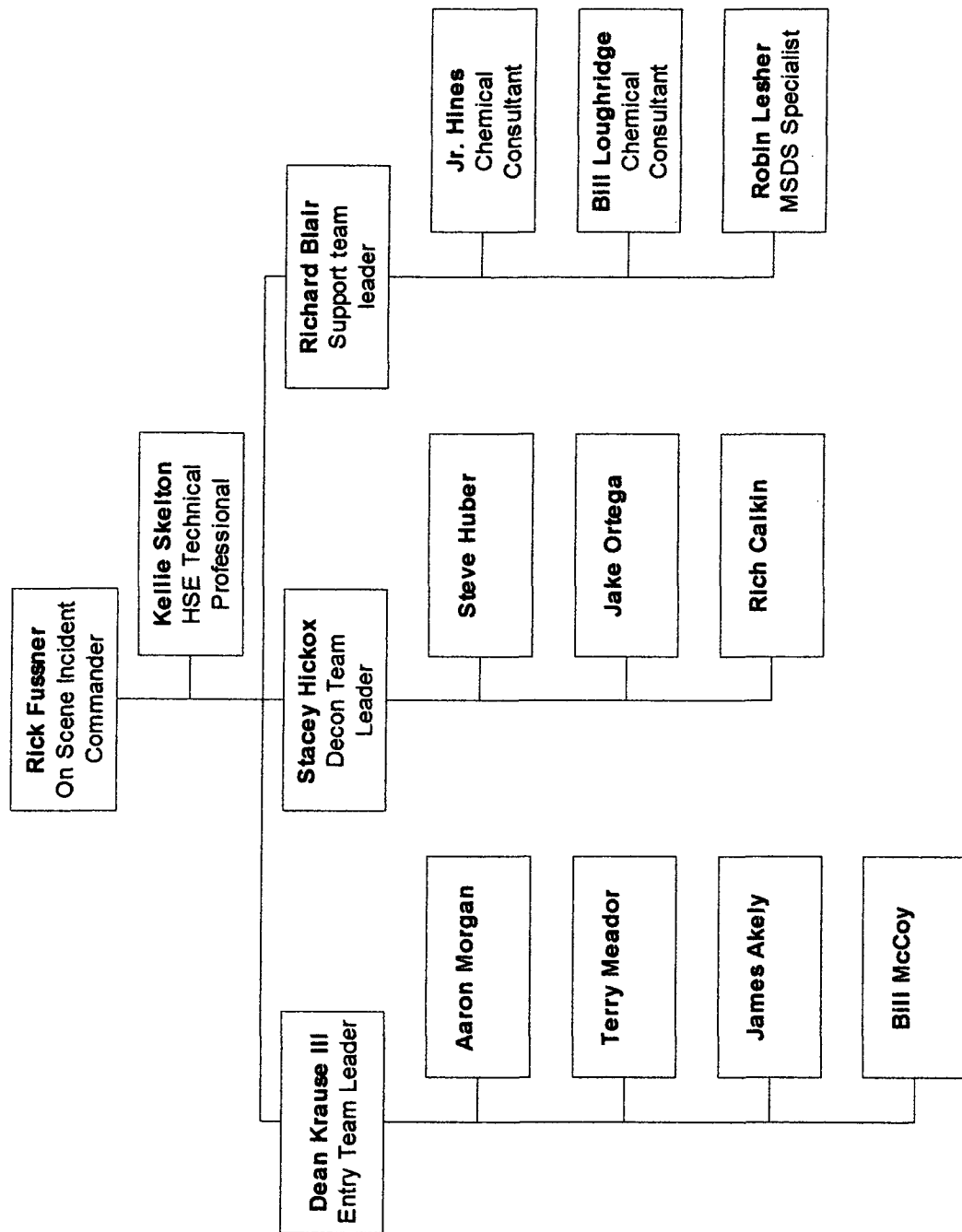
Site Plan - Location Of Emergency Response Materials, PPE, And Equipment



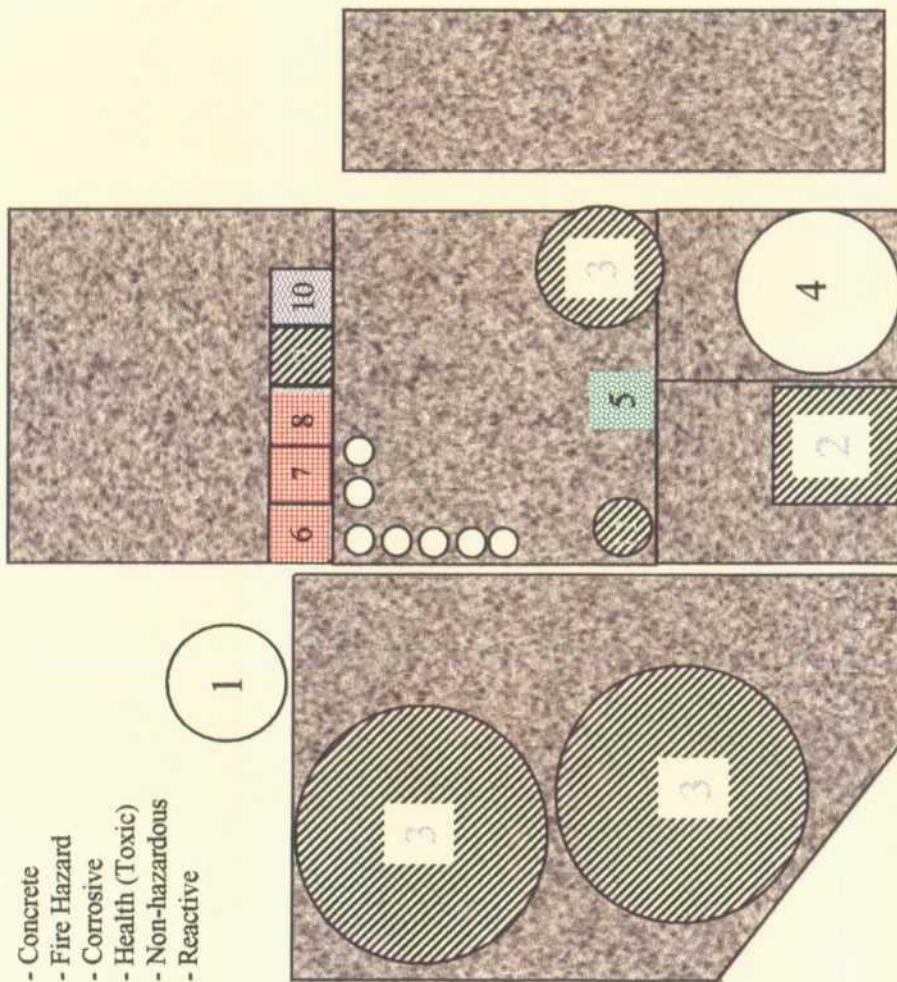
Halliburton Energy Services Farmington Facility

Site Plan - Location Of First Aid and Eyewash/Shower Facilities

Halliburton Energy Services
Hazardous Materials Response Team



- Concrete
- Fire Hazard
- Corrosive
- Health (Toxic)
- Non-hazardous
- Reactive



- | | |
|-----------------------------------|-----------------------------------|
| 1 - Fresh Water 10,000 gal. | 8 - HAI 81 M - 330 gal. |
| 2 - FE 1A - 500 gal. | 9 - Liquid Citric Acid - 330 gal. |
| 3 - Hydrochloric Acid 12,000 gal. | 10 - Cla-Sta XP - 330 gal. |
| 4 - Injectrol A - 5,000 gal. | 11 - Neutralizing Tanks |
| 5 - Clayfix II - 500 gal. | 12 - HCl Vapor Recovery Unit |
| 6 - MorFlo III - 330 gal. | |
| 7 - Losurf 3000 - 330 gal. | |

Farmington Acid Terminal

ATTACHMENT II

STOCK STATUS REPORT FOR CHEMICALS ON SITE

Material	Material Description	On-Hand
100003687	CEM,CLASS H / PREMIUM, BULK	2,205.91
100064006	Cement- Standard / Type 2 (Bulk)	4,537.00
100001575	CHEM - K-35	1,550.00
100003700	Chem- Gilsonite (Bulk)	6,660.00
100003690	Chem- Pozmix A (Bulk) Flyash	84,868.00
100001620	CHEM, ABF CMPND,US ORIGIN, 50 LB	0
101237068	CHEM, GBW-30, 50 LB IN 1 LB PKGS	1,168.00
100003639	CHEM, HALLIBURTON SUPER FLUSH, 6	0
101271196	CHEM, HYDROCHLORIC ACID, 20 BAUM	90
100003770	CHEM, MICRO MATRIX CEMENT, 50 LB	49
100003652	CHEM, SALT,MORTON-PUREX-FINE,100	4,240.00
101208549	CHEM, SANDWEDGE NT,300 GAL TOTE	3,365.00
100008210	CHEM, SANDWEDGE,300 GAL TOTE	4,210.00
100003800	CHEM,BE-6 BACTERIACIDE, 48 LB FI	1,115.00
100001576	CHEM,CLAYFIX,AMMONIUM CHLORIDE,5	0
101007446	CHEM,D-AIR 3000, 40 LB BAG	250
100001614	CHEM,HYDROCHLORIC ACID,22 BAUME,	5,592.00
100003732	CHEM,LGC-VI, BULK	825
100012222	CHEM,SILICALITE,BULK,50-50 POZMI	57,230.00
101204007	CHEM,ZONESEALANT 2000,(55 GAL)	0
100003821	CHEM-ANHIB II - PACKER FLUID	35
100003743	CHEM-AQF-2 - HALTANK	1,995.00
100003640	CHEM-BA-20 - 55 GAL	68
100003720	CHEM-BA-40L BUFFER - 55 GAL	83
100003797	CHEM-BA-40L BUFFER - HALTANK	0
100003825	CHEM-BASO4LVENT - 55 GAL	0
100012288	CHEM-BC-140 X-INKER - HALTANK	4,165.00
100012293	CHEM-BC-200 X-LINKER - HALTANK	678
100003836	CHEM-BE-3S SOLID BIOCID	48
100003806	CHEM-CAT-3 ACTIVATOR - 5 GAL	0
100003805	CHEM-CAT-3 ACTIVATOR - 55 GAL	34
100003650	CHEM-CAUSTIC SODA BEADS - 50#	1,000.00
100003710	CHEM-CL-23 - 55 GAL DRUM	90
100003822	CHEM-CL-28M X-LINKER - 55 GAL	65
100007866	CHEM-CL-31 X-LINKER - 55 GAL DRU	55
100003734	CHEM-CLA-STA XP	112
100003725	CHEM-CLAYFIX II - 55 GAL DRUM	220
100003729	CHEM-CLAYFIX II - HALTANK	1,668.00
101214215	CHEM-ER-25 - 55 GAL DRUM	340
101231188	CHEM-FDP-S605-00 - 50 LB SACK	0
100001601	CHEM-FE-1A - BULK	890
100001615	CHEM-FE-2	250
13727	CHEM-FE-2A CITRIC ACID - BULK	100

Material	Material Description	On-Hand
100003716	CHEM-FE-3A IRON SEQUESTERING	770
100001594	CHEM-FORMIC ACID - BULK	1,200.00
100003731	CHEM-FR-26LC - BULK	2,532.00
100003887	CHEM-GS-5 DSL GELLING AGENT IN L	222
100012234	CHEM-GS-6 SUSPENDING AGENT - 50#	750
100003831	CHEM-HAI-81M CORROSION INH - 55	0
100012278	CHEM-HAI-81M INHIBITOR - HALTANK	383
100003744	CHEM-HAI-85M CORR INHIB - 54 GAL	144
100003900	CHEM-HALL WASHRACK SOAP - 5 GAL	0
100012218	CHEM-HC-2 - BULK	213
101229396	CHEM-HCL 20 BAUME - 5 GAL	150
100003649	CHEM-HII-500M - 20 GAL DRUM	3
100012198	CHEM-HL BREAKER	300
100003774	CHEM-HOWCO STICKS	0
100003682	CHEMICAL - BENTONITE (PER 100 LB	972
100005053	Chemical - Calcium Chloride Hi T	95
100003653	CHEMICAL - CFR-3 - 50 LB SACK	2,900.00
101209730	Chemical - CL-36 (55 gal)	188
100001612	CHEMICAL - DIACEL LWL - LOW WATE	413
100001580	CHEMICAL - ECONOLITE-ADDITIVE, 5	3,836.00
100005049	Chemical - Flocele (25 lb sk)	3,849.00
101206563	Chemical - Halad-12 (50 lb)	350
100003646	CHEMICAL - HALAD-322 - 50 LB SAC	408
100003670	CHEMICAL - HALAD-344 - 50 LB SAC	2,039.00
100003738	Chemical - Halad-413 (50 lb)	66
100001617	Chemical - Halad-9 (50 lb)	1,507.00
100001624	CHEMICAL - HOWCO SUDS - Tote	132
100005050	Chemical - HR-5 (50 lb)	707
100001622	CHEMICAL - MF-1 - HALLIBURTON	2,700.00
100003824	CHEMICAL - MICRO FLY ASH - 50 LB	2,250.00
100003669	CHEMICAL - MICROBOND ADDITIVE -	1,050.00
100003749	CHEMICAL - SCR-100 SYNTHETIC CEM	585
100012223	Chemical - Silicalite (50 lb)	3,700.00
100003668	CHEMICAL - SUPER CBL - 50 LB PAI	68
100007865	CHEMICAL - VERSASET - 50 LB SACK	1,525.00
100003623	Chemical - WG-17-Gelling Agent -	710
101207218	Chemical - ZoneSealant 2000 - Ha	295
100001610	CHEM-ISOPROPYL ALCOHOL - 99%	768
100001574	CHEM-K-34	5,300.00
100003629	CHEM-K-38 - 50# BAG	110
100001585	CHEM-KCL POTASSIUM CHLORIDE - 50	300
100003757	CHEM-LGC-8 USING WG-26 AND GS-6	8,376.00
100003655	CHEM-LOSURF 300 - BULK	2,588.00

Material	Material Description	On-Hand
100001611	CHEM-METHANOL - METHYL-ALCHOL	55
100003693	CHEM-MO-67 - 55 GAL DRUM	106
100003776	CHEM-MO-75 OIL GELLING AGENT	0
100003777	CHEM-MO-76 OIL GEL ACTIV. - 55 G	75
100012253	CHEM-MO-76,OIL GEL ACTVTR - BULK	100
100003881	CHEM-MORFLO III SURFACTANT - 5 G	90
100003759	CHEM-MSA II INHIBITOR	339
100001636	CHEM-MUSOL A - 55 GAL	44
100012272	CHEM-OPTIFLO HTE DELAYED BREAKER	1,252.00
100003789	CHEM-OPTIFLO-II DELAYED RELEASE	34
100003801	CHEM-OPTIFLO-III DELAYED RELEASE	333
100064238	CHEM-PARACHEK 160 PRFN INHIB,POR	25
100064045	CHEM-PARASPERSE PRFN DSPRSNT - B	0
100001629	CHEM-SCA-130 - 55 GAL DRUM	55
101204276	CHEM-SCA-130 - HALTANK	120
100003624	CHEM-SP BREAKER - 10# BOX	432
100003844	CHEM-SSO-21M - WINTERIZED BULK	2,566.00
100012235	CHEM-SUPERSET W - 55 GAL DRUM	281
100003641	CHEM-TB-101 - DIVERTING AGENT	100
100001582	CHEM-TLC-80 - 55#	236
100003852	CHEM-VICON NF BREAKER - HALTANK	663
100003635	CHEM-WG-18 - 50# SACK	5,600.00
100012243	CHEM-WG-22 - 2000# BULK	34,000.00
100012194	CHEM-WS-44 - EMULSIFYING AGENT	0
100001631	CHEM-XYLENE	0
100012231	Obsolete BA-50 BORIC ACID	900
100059547	PLUG,CMTG, TOP,WOODN,TWO CUP TY,1	0
100003673	SAND-12/20 BRADY - BULK	136.6
100003677	SAND-12/20 OTTAWA - BULK	135.2
100064132	SAND-16/30 ARIZONA SILICA - BULK	2,767.80
100003674	SAND-16/30 BRADY - BULK	315.5
100064055	SAND-20/40 ARIZONA SILICA - BULK	1,508.60
100003675	SAND-20/40 BRADY - BULK	458.368
100002159	SAND-20/40 OTTAWA - 100# BAG	39
100003678	SAND-20/40 OTTAWA - BULK	2,176.80
100003755	SAND-20/40 SUPER LC - BULK RESIN	580
100003798	SAND-20/40 TEMPERED LC - BULK RE	0
100005059	Sand-200 Mesh Silica Flour(100#	8,000.00
100064056	SAND-40/70 ARIZONA SILICA - BULK	1,414.98
100008028	SUGAR, GRANULATED, 50LB BAG, IMPERI	75
29550	URANINE 2313-GREEN-DYE-1# SIZE,	5

**MATERIAL SAFETY DATA SHEET**

2621 7th Avenue South
Estherville, Iowa 51334
(712) 362-3041

PRODUCT NAME: HYPERDRIVE PARTS WASHER DETERGENT**MSDS NO: 9-51450****PAGE 1 OF 2**

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE CALL: CHEMTREC 1-800-424-9300 OUTSIDE US CALL 1-703-527-3887	FOR MEDICAL EMERGENCY CALL ROCKY MOUNTAIN POISON CENTER: 1-303-623-5716	HEALTH HAZARD: (0 None > 4 Extreme) Health = 2 Flammability = 0 Reactivity = 1
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SECTION 1 - PRODUCT IDENTIFICATION

DATE PREPARED: April 01, 2001**SUPERSEDES: April 03, 2000****PREPARED BY: Dean F. Fernholz****D.O.T. SHIPPING CLASS: Non-hazardous, cleaning compound, class 55**

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS. NO.	OSHA PEL	ACGIH TLV	ORAL LD50 RAT	Per-Cent
Sodium Metasilicate	6834-92-0	NE	NE	800 mg/kg	40-50%
Ethylene Glycol Monobutyl Ether *	111-76-2	25 ppm Skin	25 ppm Skin	470 mg/kg	1-5%
Ethoxylated Alcohol	Trade Secret	NE	NE	NE	3-7%

* subject to reporting requirements of Section 313 of SARA and 40 CFR Part 372

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

BOILING POINT: NA**SOLUBILITY IN WATER: Soluble****SPECIFIC GRAVITY: 1****VAPOR PRESSURE mm/hg: NA****VAPOR DENSITY (Air=1): NA****REACTIVITY IN WATER: None****pH 5% SOLUTION = 12.7****MELTING POINT: 212 (Deg. F.)****APPEARANCE AND ODOR: White powder**

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT: NA**FLAMMABILITY LIMITS IN AIR % BY VOLUME:****METHOD USED: NA****LEL LOWER: NA****UEL UPPER: NA****AUTO-IGNITION TEMPERATURE: NA****EXTINGUISHER MEDIA: Water, Carbon Dioxide, Foam****SPECIAL FIRE FIGHTING PROCEDURES: None****UNUSUAL FIRE & EXPLOSION HAZARDS: None**

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

STABILITY: Stable**INCOMPATIBILITY (MATERIALS TO AVOID): NA****HAZARDOUS DECOMPOSITION PRODUCTS: Heat****HAZARDOUS POLYMERIZATION: will NOT occur****CONDITIONS TO AVOID: NA**

HYPERDRIVE PARTS WASHER DETERGENT

PAGE 2 OF 2

SECTION 6 - HEALTH HAZARDS

ACUTE: Irritating and corrosive to eyes, skin, mucous membranes of the respiratory tract, mouth, throat, esophagus and stomach. Can cause permanent corneal damage.

CHRONIC: None Known

SIGNS & SYMPTOMS OF EXPOSURE: See ACUTE above

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NA

CARCINOGEN OR POTENTIAL CARCINOGENS: OSHA: None NTP: None IARC: None ACGIH: None

EMERGENCY FIRST AID:

EYES: Flush material out immediately then seek medical attention. Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure complete irrigation of the eye/lids. **SEEK MEDICAL ATTENTION IMMEDIATELY!**

SKIN: Flush thoroughly with water while removing contaminated clothing and shoes. **SEEK MEDICAL ATTENTION IMMEDIATELY!**

Discard non-rubber shoes and wash clothing before re-use.

INHALATION: Remove to fresh air. If breathing is difficult have a trained person administer oxygen. **SEEK MEDICAL ATTENTION**

INTERNAL: If swallowed, **DO NOT INDUCE VOMITING**, give large quantities of water or milk. If vomiting occurs spontaneously, keep airways clear. **SEEK MEDICAL ATTENTION IMMEDIATELY!**

ROUTES OF ENTRY:

INHALATION: Exposure to mist or spray may cause coughing or sneezing. Overexposure may result in lung tissue damage.

EYES: Can cause tissue destruction and permanent eye damage if not treated immediately.

SKIN: Can be a severe irritant. May be corrosive and cause severe burns if not washed immediately.

INGESTION: Corrosive to mucous membranes of the mouth, throat, esophagus and stomach.

SECTION 7 - SPECIAL PRECAUTIONS & SPILL / LEAK PROCEDURES

HANDLING & STORAGE: Store in a cool dry area. Keep closed when not in use.

OTHER PRECAUTIONS: None

IN CASE OF SPILL: Sweep up spilled material.

WASTE DISPOSAL: Dispose of in accordance with all Federal, State and Local pollution control regulations.

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Nuisance dust

VENTILATION: Use with adequate ventilation

PROTECTIVE GLOVES: Rubber

EYE PROTECTION: Goggles

OTHER: Waterproof suit and boots may be worn

HYGIENIC PRACTICES: Wash thoroughly after handling

SECTION 9 - COMMUNITY RIGHT TO KNOW LIST

CHEMICAL NAME:	C.A.S. NO.
1. Sodium Metasilicate	6834-92-0
2. Sodium Tripoly Phosphate	7758-29-4
3. Ethoxylated Alcohol	Trade Secret
4. Ethylene Glycol Monobutyl Ether	111-76-2

NA = Not Applicable

NE = None Established

The information provided in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the users responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. We reserve the right to revise Material Safety Data Sheets from time to time as new technical information becomes available. The information herein is furnished without warranty of any kind.

Corrective Action Taken: Talked to PE, SS and ZI Managers. Scheduled Classes For Radiation Safety General Awareness.

What will be done in the future to prevent reoccurrence? Contacted Managers asked them to pull deficiency lists and to contact me to setup classes for General Awareness.

Date Corrective Action Complete: 9/25/01

Corrective Action Complete by: Max Pedigo

Corrective Action Reviewed/Approved by GRSO/GESO:

Date:

Corrective Action Reviewed/Rejected by GRSO/GESO:

Date:

Comment:

ATTACHMENT III

TCLP ANALYSIS OF WASHRACK GRIT

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Wash Bay Sludge	Date Reported:	06-06-02
Lab ID#:	22848	Date Sampled:	06-03-02
Sample Matrix:	Soil	Date Received:	06-03-02
Preservative:	Cool	Date Analyzed:	06-04-02
Condition:	Cool and Intact	Chain of Custody:	9938

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 7.72

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: 4109 E. Main.

Christine M. Walters
Analyst

Dean E. O'Brien
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Wah Bay Sludge	Date Reported:	06-07-02
Laboratory Number:	22848	Date Sampled:	06-03-02
Chain of Custody:	9938	Date Received:	06-03-02
Sample Matrix:	TCLP Extract	Date Extracted:	06-04-02
Preservative:	Cool	Date Analyzed:	06-07-02
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

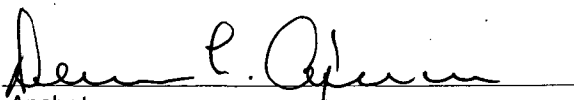
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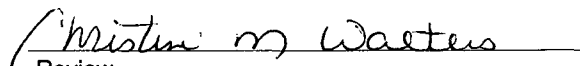
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: 4109 E. Main St.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040 PHENOLS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Wash Bay Sludge	Date Reported:	06-07-02
Laboratory Number:	22848	Date Sampled:	06-03-02
Chain of Custody:	9938	Date Received:	06-03-02
Sample Matrix:	TCLP Extract	Date Extracted:	06-04-02
Preservative:	Cool	Date Analyzed:	06-07-02
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

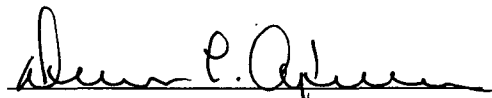
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

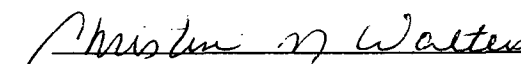
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: 4109 E. Main St.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Wash Bay Sludge	Date Reported:	06-07-02
Laboratory Number:	22848	Date Sampled:	06-03-02
Chain of Custody:	9938	Date Received:	06-03-02
Sample Matrix:	TCLP Extract	Date Extracted:	06-04-02
Preservative:	Cool	Date Analyzed:	06-07-02
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

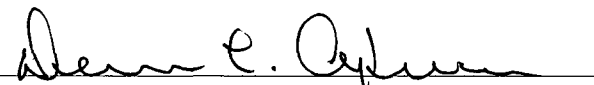
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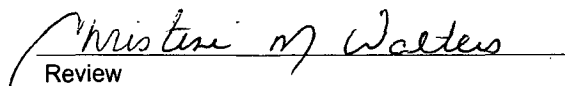
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	101%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: 4109 E. Main St.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Halliburton Energy Services	Project #:	92132-001
Sample ID:	Wash Bay Sludge	Date Reported:	06-06-02
Laboratory Number:	22848	Date Sampled:	06-03-02
Chain of Custody:	9938	Date Received:	06-03-02
Sample Matrix:	TCLP Extract	Date Analyzed:	06-06-02
Preservative:	Cool	Date Extracted:	06-04-02
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	0.880	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.047	0.001	5.0
Lead	0.479	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

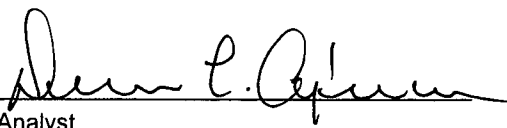
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

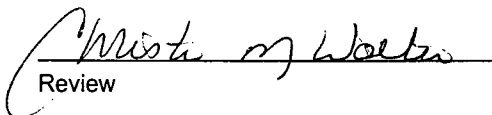
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: 4109 E. Main St.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	06-07-02
Laboratory Number:	06-07-TCV	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-07-02
Condition:	N/A	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

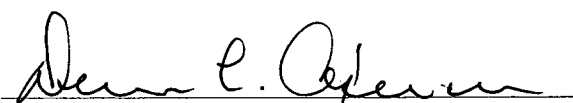
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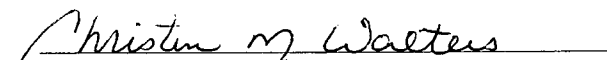
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100%
	1,4-difluorobenzene	100%
	4-bromochlorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


Review

ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	06-07-02
Laboratory Number:	06-04-TCV	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-07-02
Condition:	N/A	Date Extracted:	06-04-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

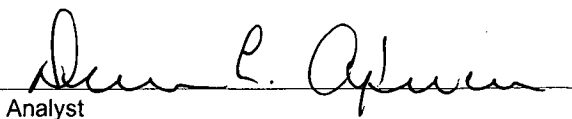
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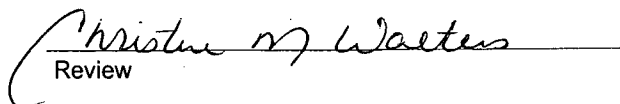
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99%
	1,4-difluorobenzene	98%
	4-bromochlorobenzene	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client: QA/QC
Sample ID: Matrix Duplicate
Laboratory Number: 22848
Sample Matrix: TCLP Extract
Analysis Requested: TCLP
Condition: N/A

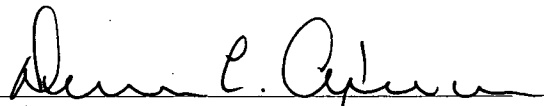
Project #: N/A
Date Reported: 06-07-02
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 06-07-02
Date Extracted: 06-04-02

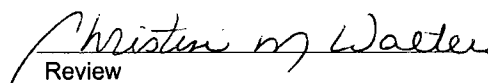
Parameter	Sample Result (mg/L)	Duplicate Sample Result (mg/L)	Detection Limits (mg/L)	Percent Difference
Vinyl Chloride	ND	ND	0.0001	0.0%
1,1-Dichloroethene	ND	ND	0.0001	0.0%
2-Butanone (MEK)	ND	ND	0.0001	0.0%
Chloroform	ND	ND	0.0001	0.0%
Carbon Tetrachloride	ND	ND	0.0001	0.0%
Benzene	ND	ND	0.0001	0.0%
1,2-Dichloroethane	ND	ND	0.0001	0.0%
Trichloroethene	ND	ND	0.0003	0.0%
Tetrachloroethene	ND	ND	0.0005	0.0%
Chlorobenzene	ND	ND	0.0003	0.0%
1,4-Dichlorobenzene	ND	ND	0.0002	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for sample 22848.


Analyst


Review

ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client: QA/QC
Sample ID: Matrix Spike
Laboratory Number: 22848
Sample Matrix: TCLP Extract
Analysis Requested: TCLP
Condition: N/A


Project #: N/A
Date Reported: 06-07-02
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 06-07-02
Date Extracted: 06-04-02

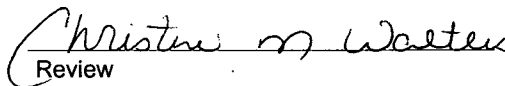
Parameter	Sample Result (mg/L)	Spike Added (mg/L)	Spiked Sample Result (mg/L)	Det. Limit (mg/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Vinyl Chloride	ND	0.050	0.0495	0.0001	99%	28-163
1,1-Dichloroethene	ND	0.050	0.0494	0.0001	99%	43-143
2-Butanone (MEK)	ND	0.050	0.0490	0.0001	98%	47-132
Chloroform	ND	0.050	0.0500	0.0001	100%	49-133
Carbon Tetrachloride	ND	0.050	0.0490	0.0001	98%	43-143
Benzene	ND	0.050	0.0495	0.0001	99%	39-150
1,2-Dichloroethane	ND	0.050	0.0490	0.0001	98%	51-147
Trichloroethene	ND	0.050	0.0495	0.0003	99%	35-146
Tetrachloroethene	ND	0.050	0.0495	0.0005	99%	26-162
Chlorobenzene	ND	0.050	0.0495	0.0003	99%	38-150
1,4-Dichlorobenzene	ND	0.050	0.0495	0.0002	99%	42-143

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for sample 22848.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040

PHENOLS

Quality Assurance Report Laboratory Blank

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	06-07-02
Laboratory Number:	06-07-TCA	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-07-02
Condition:	N/A	Analysis Requested:	TCLP

Analytical Results	Concentration	Detection	Regulatory
Parameter	(mg/L)	Limit	Limit
		(mg/L)	(mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorophenol	98 %
	2,4,6-tribromophenol	99 %

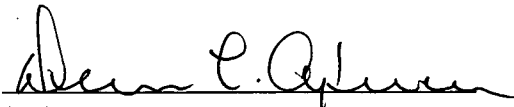
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

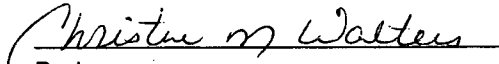
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040

PHENOLS

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	06-07-02
Laboratory Number:	06-04-TCA	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	06-04-02
Condition:	Cool & Intact	Date Analyzed:	06-07-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

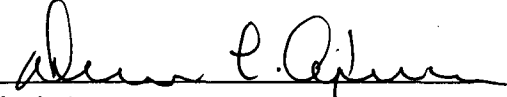
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

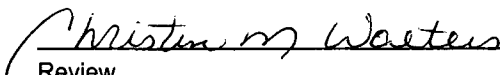
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040

PHENOLS

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	06-07-02
Laboratory Number:	22848	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	06-04-02
Condition:	Cool & Intact	Date Analyzed:	06-07-02
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Detection Limit (mg/L)	Percent Difference
o-Cresol	ND	ND	0.020	0.0%
p,m-Cresol	ND	ND	0.040	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	0.0%
Pentachlorophenol	ND	ND	0.020	0.0%

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
	8040 Compounds	30.0%

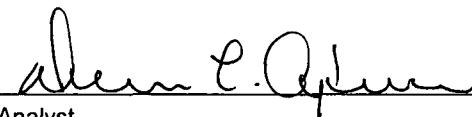
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

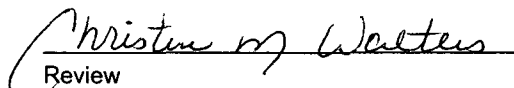
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

**EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
Quality Assurance Report**

Client: QA/QC
Sample ID: Laboratory Blank
Laboratory Number: 06-07-TBN
Sample Matrix: Hexane
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 06-07-02
Date Sampled: N/A
Date Received: N/A
Date Extracted: N/A
Date Analyzed: 06-07-02
Analysis Requested: TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

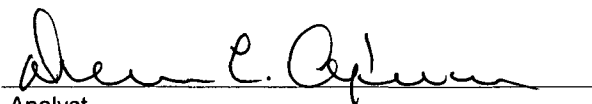
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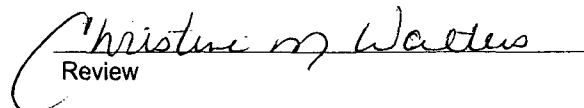
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	95%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


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ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	06-07-02
Laboratory Number:	06-04-TBN	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	Cool	Date Extracted:	06-04-02
Condition:	Cool and Intact	Date Analyzed:	06-07-02
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

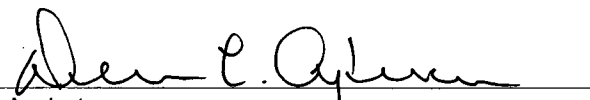
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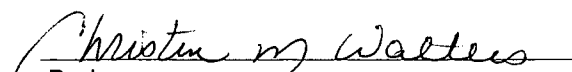
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	97%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QA/QC Matrix Duplicate Report

Client: QA/QC
Sample ID: Matrix Duplicate
Laboratory Number: 22848
Sample Matrix: TCLP Extract
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 06-07-02
Date Sampled: N/A
Date Received: N/A
Date Extracted: 06-04-02
Date Analyzed: 06-07-02
Analysis Requested: TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Percent Difference	Det. Limit (mg/L)
Pyridine	ND	ND	0.0%	0.020
Hexachloroethane	ND	ND	0.0%	0.020
Nitrobenzene	ND	ND	0.0%	0.020
Hexachlorobutadiene	ND	ND	0.0%	0.020
2,4-Dinitrotoluene	ND	ND	0.0%	0.020
HexachloroBenzene	ND	ND	0.0%	0.020

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Maximum Difference
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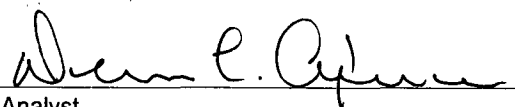
8090 Compounds

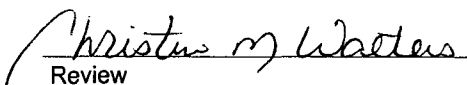
30%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-06-TCM QA/QC	Date Reported:	06-06-02
Laboratory Number:	22848	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	06-06-02
Condition:	N/A	Date Extracted:	06-04-02

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	0.880	0.878	0.2%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.047	0.046	2.1%	0% - 30%
Lead	ND	ND	0.001	0.479	0.476	0.6%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.498	99.6%	80% - 120%
Barium	0.500	0.880	1.37	99.3%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	0.047	0.546	99.8%	80% - 120%
Lead	0.500	0.479	0.977	99.8%	80% - 120%
Mercury	0.050	ND	0.049	98.0%	80% - 120%
Selenium	0.500	ND	0.497	99.4%	80% - 120%
Silver	0.500	ND	0.499	99.8%	80% - 120%

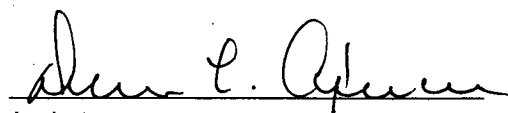
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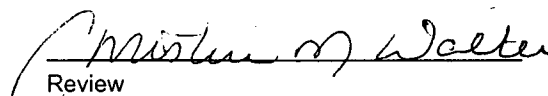
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for sample 22848.


Analyst


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ENVIROTECH INC

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

ATTACHMENT IV

FACILITY ASSESSMENTS

**(SEE ATTACHMENT VI
SPILL CONTINGENCY
PLAN)**

Performing Tier Inspection PM-FAR-HES-SS-001 Activity Steps	Shared Services Supervisor	HSE Representative	HSE Team Member	Department Supervisor	HSE Clerk	Halliburton Management System Halliburton Energy Services Shared Services Farmington NM Links & References
<p>1.0 Develop Tier Inspection Forms</p> <p>1.1 With input from the HSE Representative and the HSE Team develop location specific Tier Inspection Forms.</p> <p>1.2 Forwards completed forms to HSE Representative</p> <p>1.3 Post</p> <p>2.0 Performing Daily Tier Inspections</p> <p>2.1 Perform the daily inspection as per the inspection form.</p> <p>2.2 Review the daily inspection with department supervisor.</p> <p>2.3 Ensure corrective actions identified have been corrected.</p> <p>2.4 Forwards daily at the end of each week to the Shared Services Supervisor.</p> <p>2.5 Reviews the inspection and forwards to HSE Clerk.</p> <p>2.6 Documents completion of the inspection and files form in the tier inspection file.</p> <p>3.0 Performing Weekly Tier Inspections</p> <p>3.1 Perform the weekly inspection as per the inspection form.</p> <p>3.2 Review the weekly inspection with department supervisor.</p> <p>3.3 Ensure corrective actions identified have been corrected.</p> <p>3.4 Forwards weekly at the end of each week to the Shared Services Supervisor.</p> <p>3.5 Reviews the inspection and forwards to HSE Clerk.</p>						<div> SCOPE, PURPOSE DEFINITIONS REVISION HISTORY </div> <div> Farmington Tier Inspection Forms </div> <div> NOTE: 2.1 Inspection should be performed as early in shift as possible. </div> <div> NOTE: 2.3 If corrective actions can not be completed in a timely manner initiate a CPI to get item corrected. </div> <div> NOTE: 3.1 Inspection should be performed as early in week as possible to allow for closing of corrective actions. </div> <div> NOTE: 3.3 If corrective actions can not be completed in a timely manner initiate a CPI to get item corrected. </div>

AUTHOR:
Allen Rodrigue

APPROVED BY:
Allen Rodrigue
Shared Services Supervisor

REVISION DATE:
15-Mar-02
Page 1 of 2

Performing Tier Inspection PM-FAR-HES-SS-001 Activity Steps	Shared Services Supervisor	HSE Representative	HSE Team Member	Department Supervisor	HSE Clerk	Halliburton Management System Halliburton Energy Services Shared Services Farmington NM Links & References
<p>3.6 Documents completion of the inspection and files form in the tier inspection file.</p> <p>4.0 Performing Monthly Tier Inspections</p> <p>4.1 Perform the monthly inspection as per the inspection form.</p> <p>4.2 Review the monthly inspection with department supervisor.</p> <p>4.3 Ensure corrective actions identified have been corrected.</p> <p>4.4 Bring inspection form to monthly HSE Team Meeting and reviews inspection with the HSE Team.</p> <p>4.5 Collects the completed inspection forms and files in the tier inspection file</p> <p>5.0 Complete Monthly Tier Inspections Report</p> <p>5.1 Using the report form count the number of tier inspection completed.</p> <p>5.2 Using the completed tier inspection forms count the number of corrective action identified and the number of corrective actions closed.</p> <p>5.3 Review the report and transfer need information to the month NWA report form.</p> <p>5.4 Forward the monthly report to the NWA Shared Services Manger.</p>						<p>NOTE: 4.1 Inspection should be performed as early in month as possible to allow for closing of corrective actions..</p> <p>NOTE: 4.3 If corrective actions can not be completed in a timely manner initiate a CPI to get item corrected.</p> <p>Farmington Monthly Report</p> <p>NWA Month Report</p> <p>NOTE: 5.4. Reports to the NWA Shared Services Manager are to be sent by the 10th of each month.</p>

AUTHOR:
Allen Rodrigue

APPROVED BY:
Allen Rodrigue
Shared Services Supervisor

REVISION DATE:
15-Mar-02
Page 2 of 2

ATTACHMENT V

STORMWATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN
HALLIBURTON ENERGY SERVICES

4109 East Main Street
Farmington, New Mexico
Revised August 21, 2002

INTRODUCTION

The purpose of the Plan is to protect water quality by reducing the amount of pollutants in storm water runoff. These pollutants come from two sources: 1) our outdoor activities, and 2) atmospheric deposition over which we have no control. The Plan covers the entire facility.

1.1 Purpose of the SWPPP

The Company Policy requires us to prepare a Storm Water Pollution Prevention Plan (SWPPP). It describes the measures that we will take as specified in our plan. This plan is to be kept on the premises.

1.2 BMP Implementation Committee

The Policy requires that the SWPPP identify personnel to oversee the implementation of any measures to reduce pollution, called Best Management Practices (BMP), and to modify the SWPPP as necessary over time. We have formed a team, which participated in the preparation of this plan and will oversee its implementation.

1.3 Implementation Schedule

All of the recommendations of BMPs made by the team (that do not involve the expenditures of capital funds) are to be implemented by the end of April 1998.

1.4 Protocol on Public Access to the SWPPP

Although this is a Company plan, meant for the use by our employees, it is a public document. Representatives of Government who visit the Facility are allowed direct access to the plan when on site. Any request for a copy of the plan is to be forwarded to the Area Health, Safety and Environment Manager.

Business Definition
Farmington Service Center

The Farmington District facility is located at 4109 E. Main Farmington N. M. 87402. The Primary services provided are hydraulic fracturing, cementing, and acidizing oil and gas wells.

Maintenance of trucks and loading of bulk materials occur at the facility. Truck maintenance is performed in an enclosed shop that is self-contained. Trucks are washed in enclosed structure, water from the wash rack discharge to the sewer. Solids are tested annually and disposed of at a certified solid waste land farm.

A complete list of commonly used chemicals stored at the facility is available with this report. Loading and unloading of all bulk liquids is done in contained areas. Dry bulk materials stored at the facility include cement, gel, silica flour, Gilsonite and sand. Dust collectors are used to control emissions from the bulk plant.

Sacked dry chemicals are stored in either a covered area, or in an enclosed building. Drummed liquid chemicals may either be stored in an enclosed building, covered area, or in the open. All chemicals are stored within secondary containment. All chemicals are stored on cement or paved areas.

The facility was not built to contain Storm water runoff or to divert Storm water run-on.

Site Assessment

Halliburton Services- Farmington District

Material Inventory:

A variety of materials are stored in several different forms, the majority of, which are stored in covered or contained areas.

Chemical Terminal:

HCL acid is stored, in a concentrated form, in a sealed tank. This tank is inside a coated concrete containment structure. Connections for loading of the HCL acid tank are also inside the structure. Any spills occurring inside the structure are immediately recovered and reused. An inspection of the facility found no leaks.

Additional additives are stored in the acid additive drum storage are. Additives are either stored in closed drums or in large bulk portable containers. There is minimal exposure of these drummed chemicals to storm water because the chemicals are stored and handled within secondary containment. Any Storm water that is captured in the containment is recovered and reused for acid blending.

Acid is loaded into Halliburton transports overhead through a hatch on the top of the transport. The transport is located on coated concrete, contained loading bay during this process. The loading bay is equipped with a retaining pit and concrete berm to contain any spill. Any spills are immediately recovered and reused.

LGC Terminal:

LGC is a concentrated polymer solution containing gel and diesel. LGC is stored at the terminal in sealed tanks. All tanks are located within concrete containment. All mixing and loading of the LGC occurs on the cement structure. Any spills occurring inside the structure are immediately cleaned and properly disposed of. An inspection of the facility found no leaks.

Cement Bulk and Sand Storage and Admix Building:

Bulk cement, bulk sand, proppants, and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement materials warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed of.

Mixing and transfer of materials from the plant to a bulk truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk additives.

Maintenance Shop:

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation that is self-contained. Any spills are cleaned up using an absorbent is then properly disposed.

Trucks are serviced in the main shop. All used oil is discarded in a used oil tank. The used oil tank is located outside the east end of the shop with secondary containment being a tank within a tank. Used oil filters are drained at least 12 hours and placed in a sealed drum and shipped back to our Duncan OK TSDF for reclamation.

Grease Shop:

Trucks are lubricated in this shop. Lubricants are stored in sealed bulk storage tanks and sealed drums in self-contained, concrete floored, covered shop. Any spills occurring inside the grease shop are immediately cleaned and properly disposed of.

Wash Rack:

Truck washing is performed in an enclosed structure. Each wash bay is equipped with a floor drain, which separates solids and skims oil. These drain to a three-stage separation facility that empties to city sewer.

Drum Storage Area:

Chemicals are stored in exposed sealed portable containers or drums. This area is paved and curbed with asphalt. Inspections of this area are performed each workday with any spills detected immediately cleaned and properly disposed.

Miscellaneous:

In addition to the previously described management practices the following are also in effect: Trash containers are conveniently located throughout the facility, and regularly emptied by a waste handling service. Paved surfaces are inspected and cleaned as required. Used drums, sacks, pallets, etc. are properly discarded, reusable drums are returned. Non-use areas are cleaned of weed and debris as needed. Management maintains a good housekeeping policy.

Past Spills, and Leaks:

There have been two significant spills at this location in the past 3 years. The first spill occurred on October 11, 2000 it was at the LGC plant where a valve was inadvertently left on during refilling process. There was approximately 200 gallons of diesel based LGC spilled. The spill was contained to the secondary containment. The spill was cleaned and disposed of at a approved facility. The second spill occurred on December 7, 2000 when a vendor inadvertently connected to the drain line instead of the acid fill line. Approximately 100 gallons of acid was lost to the city sewer. Immediate notifications and actions were taken to minimize impact. Additional actions have been taken to prevent reoccurrences of both incidents. Automated gates and locks have been added.

Non-Storm Water Discharges:

The city modified Gila Street which is north of the facility. The street was paved and drains were added. The entrance on the north side of the facility was raised to assist in the diversion of run on water to the drains. Run on water can still enter from the city street system and leave our property to the south. There is no system set up at the present time to contain the water runoff.

POLLUTION PREVENTION TEAM

Worksheet #1

MEMBERSHIP ROSTER

Completed by: Allen Rodrigue

Title: Facility Supervisor

Date: 08-15-02

Facility Information: Halliburton Energy Services
4109 East Main St. Farmington, NM. 87401

Physical Address (actual physical location):

Same as above

Mailing Address Halliburton Energy Services
P.O. Box, 960
Farmington, New Mexico 87499

City

State

Zip

Team Leader: Rick Fussner

Title: MECHANIC

Phone: (505) 324- 3500

Responsibilities: TO PROVIDE THE LEADERSHIP TO ENSURE THE DEVELOPMENT & IMPLEMENTATION
OF THE STORMWATER POLLUTION PREVENTION PLAN. LEAD ONGOING COMPLIANCE, REVIEW & UPDATE
OF THE PLAN.

Members:

1. Marvin Hines Jr.

Title: Chemical Loader

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

Kerry Begay

Title: Admin Assistance

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

3. Dean Krause III

Title: Materials Supervisor

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

4. Jake Ortega

Title: Service Assistance

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

5. Richard Blair

Title: Service Planner

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

6. Robin Leshner

Title: Lab Tech

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

7. Scott Skelton

Title: Tool Tech

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

Date: 8-15-02

Zip

[illegible]

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION

Worksheet #5

Completed by: Allen Rodrigue

Title: Facility Supervisor

Date: 8/15/02

Location: 4109 East Main St.
Pumping Service Facility

City: Farmington ST ST New Mexico ZIP 87402

Date of Test or Evaluation	Outfall Directly Observed During the Test (Identify as Indicated on the Site Map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
Quarterly	located on the map as drainage area	Visual as weather permits	n/a	oil and dirt	Steve Huber

CERTIFICATION

I, Allen Rodrigue, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

A. Allen Rodrigue Facility Supervisor

B. Area Code & Telephone # (505) 324-3504

C. Signature Allen Rodrigue

D. Date Signed 8-28-02

NOTE: This worksheet MUST be signed by the Facility Supervisor.

NON-STORM WATER DISCHARGE ASSESSMENT AND FAILURE TO CERTIFY NOTIFICATION

Worksheet #6

Completed by: Allen Rodrigue

Title: Facility Supervisor

Date: 8/15/02

Location:

4109 East Main St Facility

City

Farmington ST

New Mexico ZIP 87402

Directions: If you cannot feasibly test or evaluate an outfall, fill in the table below with the appropriate information and sign this form to certify the accuracy of the included information.

List all outfalls not tested or evaluated, describe any potential sources of non-storm water pollution from listed outfalls, and state the reason(s) why certification is not possible. Use the key from your site map to identify each outfall.

Important Notice: A copy of this notification must be signed and submitted to the Director within 180 days of the effective date this permit.

Identify Outfall Not Tested/Evaluated	Description of Why Certification is Infeasible	Description of Potential Sources of Non-Storm Water Pollution
NOT APPLICABLE		

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations, and that such notification has been made to the Director within 180 days of (date permit was issued), the effective date of this permit.

A. Allen Rodrigue Facility Supervisor

B. Area Code & Telephone # (505) 324-3500

C. Signature *Allen Rodrigue*

D. Date Signed 8-28-02

POLLUTANT SOURCE IDENTIFICATION (Section 2.2.6)

Worksheet #7

Completed by: Allen Rodrigue

Title: Facility Supervisor

Date: 8/15/02

Location: 4109 EAST MAIN STREET

CITY FARMINGTON

ST NM ZIP 87402

Instructions: List all identified storm water pollutant sources and describe existing management practices that address those sources. In the third column, list BMP options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Option
1. Wash Bays	The wash bays are covered and enclosed on three sides. Mud and Grit removed periodically and area cleaned. Some overspray travels out of bays.	Good Housekeeping, and Inspections. Overspray controlled.
2. Parking Areas	Oil and Grease on Parking areas. The area is inspected and cleaned at least weekly.	Regular Inspections, preventative maintenance on equipment, designated parking areas ; cleanup week
3. Chemical Storage Area	Curbed, Stormwater recovered and reused	Good Housekeeping ; Inspections ; Spill Prevention and response ; Proper practices and procedures
4. Chemical Terminal	All activities at Chemical Terminal are within secondary containment. All Stormwater collected and reused.	Preventative Maintenance and Inspections, Good housekeeping ; Proper loading and unloading Procedures
5. LGC Plant	All activities at LGC Plant are within secondary containment. Stormwater collected and reused.	Weekly inspections ; In containment ; Proper practice and procedures
6. Wash rack Grit Drying Slab	Removed offsite periodically	New slab that drains to wash bay sumps
7. Lubrication Bays	Clean up spills/leaks with absorbents	Good Housekeeping ; Preventative maintenance ; Inspections and proper work procedures
8. Bulk Cement Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping
9. Bulk Sand Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping
10. Empty Container Storage	Stored within secondary containment. Stormwater allowed to dry.	Cover with roof

**BMP IDENTIFICATION
(Section 2.3.1)**

Worksheet #7a

Completed by: Allen Rodrique

Title: Facility Supervisor

Date: 3/18/1998

Location: 4109 East Main St Facility City: Farmington ST: New Mexico ZIP: 87402

Instructions: Describe the Best Management Practices you have selected to include in your plan. For each of the baseline BMPs, describe actions that will be incorporated into facility operations. Also describe any additional BMPs (activity-specific and site-specific) you have selected. Attach additional sheets if necessary

Best Management Practices	Brief Description of Activities
Good Housekeeping	MATERIALS STORED PROPERLY. KEEP WORK AREAS ORGINIZED. ADDRESS SPILLS PROPERLY. PROVIDE COMPLETE MAINTENANCE AS NEEDED. CREATE & IMPLEMENT "CLEAN " STANDARD. CONTINUES EMPLOYEE AWARENESS TRAINING.
Proper Work Procedures and Practices Preventative Maintenance	Develop and document proper work practices and procedures to minimize incidents COMPLETE PROPER PRE/POST TRIP INSPECTION RECORDING ANY DEFICIENCIES. IDENTIFY, SCHEDULE RESPOND TO ANY DEFICIENCIES IMPLEMENT ACCOUNTABILITY FOR EQUIPMENT AND WORK AREAS.
Tiered Inspections	COMPLETE WORKDAY, WEEKLY AND MONTHLY FACILITY SELF AUDIT. FOLLOW UP B COMPLETING ACTION ITEMS IN A TIMELY MANNER. PRE / POST TRIP INSPECTIONS COMPLETED AND CORRECTIVE ACTION COMPLETED.
Spill Prevention and Response	MAINTAIN A TRIAINED SPILL RESPONSE TEAM. AWARENESS TRAINING FOR ALL EMPLOYEES. FOLLOW PROPER MAINTENANCE PROCEDURES. GOOD HOUSEKEEPIN ADHERE TO INCIDENT REPORTING AND FOLLOW UP PROGRAM. SPILL KITS USED AN MAINTAINED.
SEDIMENT AND EROSION CONTROL	PAVING AND GRAVELING CERTAIN AREAS TO MINIMIZE EROSION.
STORMWATER RUNOFF MANAGEMENT	ENGINEERING CONTROLS. GOOD HOUSEKEEPING. SPILL PREVENTION AND RESPONSE.
RISK MANAGEMENT AND EVALUATION	DIVERSION STRUCTURES TO CONTROL RUNON AND DIRECT RUNOFF. USE RISK MANAGEMENT TECHNIQUES TO IDENTIFY AND CORRECT POTENTIAL ENVIORMENTAL RISKS IN EVERYDAY ACTIVITIES.
QUARTERLY STORMWATER MONITORING	SAMPLE STORMWATER QUARTERLY TO EVALUATE RUNOFF QUALITY.

IMPLEMENTATION (Section 2.4.1)

Worksheet #8

Completed by: Allen Rodrique

Title: Facility Supervisor

Date: 08-15-02

Location: 4109 East Main Facility City: Farmington ST: New Mexico ZIP: 87402

Instructions: Develop a schedule for implementing each BMP. Provide a brief description, the steps necessary for implementation (i.e., any construction or design), the schedule for completing those steps (list dates), and those responsible for implementation.

BMPs	Description of Action Required for Implementation	Scheduled Completion Date	Person Responsible for Action	Description of Activities
Good Housekeeping	PSL, /Department Define Minimum expectations	On going	Team Leader/ PSL Coord/ Facility Supervisor	Identify problems with tiered inspections, define Corrective Action: and assign responsible person
	Provide resources & implement.	On going	Team Leader / Psl Coord /Facility Supervisor	
	Follow up.	Ongoing		
Preventative Maintenance	Employee Awareness Training	Ongoing	Team & MBU leader	
	Accountability	Ongoing	Team leader/ PSL Coord	
Inspections	Implement Workday, Weekly, & Monthly Inspections	Ongoing	HSE Team	
	Pre /Post Trip Inspections	Ongoing	Team Leader /MBU Member	
Spill Prevention and Response	Review Awareness Training.	At Team/ Bus Review Mtg.	Team Leader/HSE Team environmental Coord	
	Procedures Followed.	Ongoing	All Employees.	
Sediment and Erosion Control	Maintain Paving	Ongoing	Shared Service Supervisor	Continue protect & gravel areas of exposed soil
Management of Runoff	See Good Housekeeping.	Ongoing	All Personal	
	See Inspections.			
Additional BMPs (Activity-specific and Site-specific)	Assign Parking Areas For Equipment	Ongoing	HSE Team /PSL Coord	

EMPLOYEE TRAINING (Section 2.4.2)

Worksheet #9

Completed by: Allen Rodrigue
Title: Facility Supervisor
Date: 3/18/1998

Location: 4109 East Main St Facility City: Farmington ST: New Mexico ZIP: 87402

Instructions: Develop a schedule for implementing each BMP. Provide a brief description, the steps necessary for implementation (i.e., any construction or design), the schedule for completing those steps (list dates), and those responsible for implementation.

Training Topic	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Spill Prevention and Response	Facility specific spill contingency plan and Hazwoper training	Ongoing training and refresher as required	Selected Spill Response Team
Good Housekeeping	Tired Inspection Program and Corrective Actions	Ongoing	All Employees.
Material Management Practices	Material Management Training.	Ongoing	Materials Personnel
Other Topics	Environmental Awareness Training. Stormwater Pollution Prevention Training. Waste Storage and Transportation Cement/Sand Plant Environmental Mgmt. Chemical Terminal Environmental Mgmt. Maintenance Shop Environmental Mgmt.	Ongoing Annually Annually Annually Annually Annually	All Employees. All Employees. Materials Personnel Bulk Plant Personnel Chemical Terminal Pers Maintenance Personnel

ATTACHMENT VI

SPILL CONTINGENCY PLAN

SPCC

**4109 EAST MAIN STREET
FARMINGTON, NM.
Revised August 2002**

Business Definition
Farmington, New Mexico Service Center

The Farmington Main Street Service Center is located at 4109 East Main Street, Farmington, NM 87402. The primary services provided are hydraulic fracturing, cementing, acidizing, and open hole logging of oil and gas wells.

Maintenance of trucks and loading of bulk materials occur at the facility. Truck maintenance is performed in an enclosed shop that is self-contained. Trucks are washed in an enclosed structure, water from the wash rack is discharged to an oil / water separator, excess is hauled to an approved disposal site. Solids are also disposed of at a state approved solid waste site.

The complete list of commonly used chemicals stored at the facility is attached with this report. Loading and unloading of all bulk liquids is done in contained areas. Dry bulk materials stored at the facility include cement, bentonite, and flyash. Dust collectors are used to control emissions from the bulk plant.

Sacked dry chemicals are stored in either a covered area, or in an enclosed building. Drummed liquid chemicals may either be stored in an enclosed building, covered area, or in the open. All chemicals are stored within secondary containment.

The facility was not built to contain stormwater runoff or to divert stormwater runoff.

Site Assessment

Halliburton Energy Services – Farmington Service Center

Material Inventory:

A variety of materials are stored in several different forms, the majority of, which are stored in covered or contained areas. A complete material inventory is included with this report and with an exposed material inventory.

LGC Terminal:

LGC (Liquid Gel Concentrate) is a concentrated polymer solution containing fracturing gel (Guar) and diesel. LGC is stored at the terminal in exposed sealed tanks. All tanks are located on a concrete structure that is buried. All mixing and loading of the LGC occurs on the concrete structure. Any spills occurring inside the structure are immediately cleaned up and properly disposed of.

Sacked fracturing gel is stored in enclosed warehouse or covered on the concrete structure prior to mixing. Also certain drummed chemicals required for the LGC are stored in the warehouse. Any spills occurring inside the warehouse are immediately cleaned up and properly disposed of.

Cement Admix Building:

Bulk cement and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are mixed in the cement materials warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed of.

Mixing and transfer of materials from the plant to a bulk truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling bulk additives.

Maintenance Shop:

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation that is self-contained. Any spills are cleaned up using an absorbent and then are properly disposed of.

Service of the trucks is performed in the main shop. All used oil is discarded in a waste tank. The waste oil tanks are located in a concrete structure on the facility for

secondary containment. Used oil filters are drained and placed in an exposed sealed drum and shipped back to our corporate office for reclamation.

Grease Shop:

Trucks are filled with lubricant in this shop. Lubricants are stored in exposed sealed bulk storage tanks and exposed sealed drums in a self-contained, concrete, covered shop. Any spills occurring inside the grease shop are immediately cleaned and properly disposed of.

Wash Rack:

Truck washing is performed in an enclosed structure. The wash bay is equipped with a floor drain, which separates solids and skims oil. These drain into a four-stage separation facility where wastewater is hauled to a state approved disposal facility.

Drum Storage area:

Chemicals are stored in exposed sealed tote tanks or drums in the warehouse. This area is an enclosed concrete structure that is buried for containment. An inspection of the facility is performed frequently and any spills occurring in the warehouse are immediately cleaned and properly disposed of according to the material's MSDS.

Miscellaneous:

In addition to the previously described management practices the following are also in effect: Trash containers are located throughout the facility, and regularly emptied by a waste handling service. Parking areas are inspected and cleaned as required. Used drums, sacks, pallets, etc. are properly discarded, reusable drums are returned. Non-use areas are cleaned of weed and debris as needed. Management maintains a good housekeeping policy.

Past Spills, and Leaks:

There have been two significant spills at this location in the past 3 years. The first spill occurred on October 11, 2000 it was at the LGC plant where a valve was inadvertently left on during refilling process. There was approximately 200 gallons of diesel based LGC spilled. The spill was contained to the secondary containment.

The spill was cleaned and disposed of at a approved facility. The second spill occurred on December 7, 2000 when a vendor inadvertently connected to the drain line instead of the acid fill line. Approximately 100 gallons of acid was lost to the city sewer. Immediate notifications and actions were taken to minimize impact. Additional actions have been taken to prevent reoccurrences of both incidents. Automated gates and locks have been added.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

City: FARMINGTON

State: NEW MEXICO

Zip: 87402

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN PART I GENERAL INFORMATION

Completed by: K.Skelton
Title: HSE Tech. Prof.
Date: 08/20/2002

1. Type of Facility: Oil Field Service
2. Name and address of Owner or Operator:
Halliburton Energy Services
P.O. Drawer 1431
Duncan, OK 73536-0105
3. Designated person accountable for oil spill prevention at facility:
Allen Rodrigue
4. Facility experienced a reportable oil spill event during the previous three (3) Years.
Yes ___ No X

If yes, complete Attachment No. 1.

MANAGEMENT APPROVAL

The SPCC Plan will be implemented as herein described.

Signature: Allen Rodrigue

Name: ALLEN RODRIGUE

Title: FACILITY SUPERVISOR

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Denise A. Tuck

Printed/Typed Name of Registered Professional Engineer

(Seal)

M. Denise A. Tuck

Signature of Registered Professional Engineer

Date: 08/28/02

Registration No. 78105

State Texas

SPILL PREVENTION CONTROL & COUNTERMEASURE PLANFacility Location: 4109 EAST MAIN STCity: FARMINGTONState: NEW MEXICOZip: 87402**Applicability of the Substantial Harm Criteria****Spill Prevention Control and Countermeasure Plan (SPCC)**Facility Name - Halliburton Energy ServicesAddress- 4109 EAST MAIN STREETCity- FARMINGTONST - NMZip - 87402

YES/NO

Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, Section 10, for availability) and the applicable Area Contingency Plan.

NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in attachment C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

NO

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a Reportable oil spill in an amount greater or equal to 10,000 gallons within the last 5 years?

NO

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature Allen RodriguezTitle: FACILITY SUPERVISOR

Name (please type or print):

ALLEN RODRIGUEZ

1 If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

2 For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR § 143.2(c).

SPILL PREVENTION CONTROL & COUNTERMEASURE PLANFacility Location: 4109 EAST MAIN STCity: FARMINGTONState: NEW MEXICOZip: 87402**Emergency Notification Phone List Whom to Notify****SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)**

Reporter's Name	Date 09-25-00
Date of Last Plan Update: 04-02-97	Date/Time of Each NRC Notification:
Organization	Phone Number
National Response Center (NRC)	1 (800) 424-8802
Qualified Individual ALLEN RODRIGUE	Daytime 505-324-3500 Evening 505-320-0865
Company Response Team - DISPATCH	Daytime 505-324-3500 Evening 505-324-3500
On-Scene Coordinator (OSC) and/or Regional Response Center (RRC)	Daytime 505-324-3500 Evening 505-634-0840 Mobile 505-486-3853
Local Response Team (Fire Department/Cooperatives)	911 or (505) 334-6622
Fire Marshall	505-334-6622
State Emergency Response Commission (SERC)	505-334-9787
City Police	505-334-6622
State Police	505- 325- 7547
Local Emergency Planning Committee (LEPC)	505-334-1180
Local Water Supply System	505-326-1918
Weather Report:	
Local TV/Radio Station for Evacuation Notification	713-676-4371
Hospitals	505-325-5011
	505-325-6741
Local POTW (Sewage Treatment Plant)	
HSE Tech. Professional	Office 505-324-3540 Home 505-564-3366 Mobile 505-486-3464

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

City: FARMINGTON

State: NEW MEXICO

Zip: 87402

SPCC PLAN, PART I, GENERAL INFORMATION (Continued)

5. Potential Spills -- Prediction & Control

Potential Spills -- Prediction and Control (tank and container inventory)					
Source	Major Type of Failure	Total Quantity (bbls/gals.)	Rate (bbls/hr)	Direction of Flow*	Secondary Containment
Bulk Acid tank	Failure, rupture of tank or discharge lines	13,000 gal.	300 gal.	Inside Containment	Lined concrete with DBL capacity
LGC storage tank	Failure, rupture of tank or discharge lines	6000 gal.	100 gal.	Inside containment	Concrete retaining walls
3 X 120 new antifreeze tanks in Maintenance Bldg	Failure, rupture of tank or discharge lines	630 gal.	210 gal.	Inside oil service stall contained area	Oil service area is contained and all drains to central floor trap
3 X 120 new oil tanks in Maintenance Bldg	Failure, rupture of tank or discharge lines	630 gal.	210gal.	Inside oil service stall contained area	Oil service area is contained and all drains to central floor trap
Used oil tank in Maintenance Bldg	Failure , rupture of fill line or discharge line	200 gal.	100 gal.	Inside containment, (tank also has a high level alarm)	Doubled steel tanks construction
New motor oil 1X 55 gal. drum in shop	Failure or Rupture	400 gal.	55 gal.	inside oil service stall contained area	Oil service area is contained and all fluids drain to central floor trap.
Outside new motor oil 2 X 55 gal. Drums	Failure or rupture	110 gal.	55 gal.	Inside containment	In building containment
New 1 X 55 gal. drum of shop tube oil	Failure or rupture	55 gal.	55 gal.	Inside containment	In building containment
Outside Stormwater containment	Overfill	6000 gal.	500 gal.	Inside containment	Secondary containment

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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Chemical storage 30 X 330 gal tanks	Rupture hal tanks.	9900 gal.	330 gal.	Inside the floor containment.	Concrete floor is contained
Oil/Water separator pit	Overfill	100 gal.	inflow rate if full.	To sewer line	none
Chemical mix building 2 X 345 gal tanks HAI-81 Formic acid	Rupture of drums, hal tanks or lines.	690 gal.	330 gal	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Chemical mix building WS-44	Rupture of hal tank or lines.	165 gal.	165 gal	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Chemical mix building CLA-STA XP	Rupture of hal tank or lines.	165 gal.	165 gal	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Chemical mix building 165 gal tanks MSA-II	Rupture of hal tank or lines.	165 gal.	165 gal	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Chemical mix building HAI-85	Rupture of drums, hal tanks or lines.	165 gal.	1 bbl	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Outside chemical mix building 345 gal tanks FE-1A	Rupture of drums, hal tanks or lines.	330 gal.	1 bbl	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
Chemical mix building FE-2A Citric acid	Rupture of hal tank or lines.	165 gal.	1 bbl	Inside the floor containment.	Steel with chemical resistant lining under floor grate.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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Chemical mix building Losurf-300	Rupture of drums, hal tanks or lines.	165 drums	1 bbl	Inside the floor containment.	Steel with chemical resistant lining under floor grate.
2x6000 gal grey water tanks	Rupture of tanks	6000 gallons	100 bbl	Inside the floor containment.	Lined concrete with double capacity.
Bulk plant 50-365 gallon totes	Rupture of drums, hal tanks.	365 gallons	1 bbl	Inside the floor containment	

Discussion:

Periodic inspections are conducted to ensure integrity of storage equipment and containment. All tanks and bulk storage are within buildings or inside lined containment.

SPCC PLAN, PART I, GENERAL INFORMATION (Continued)

6. Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. If NO, complete Attachment No. 2. Yes ☒ No ___ N/A ___

7. Inspections and Records

- A. The required inspections follow written procedures. Yes ☒ No ___ N/A ___
- B. The written procedures and a record of inspections, signed by the appropriate supervisor or inspector, are attached. Yes ☒ No ___ N/A ___

Discussion: All bulk storage tanks and areas of storage will be inspected on a regular and frequent basis by designated personnel. Any and all visible problems will be immediately reported to management with appropriate corrective action taken. Said inspections will include visual checks of all components of the systems, containment apparatus, support structures, and delivery systems.

* See Attached inspection sheets and instructions.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN
 Facility Location: 4109 EAST MAIN ST
 City: FARMINGTON State: NEW MEXICO Zip: 87402

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[illegible]

SPCC PLAN, PART I, GENERAL INFORMATION (Continued)

8. Personnel Training and Spill Prevention Procedures

A. Personnel are properly instructed in the following

(1) Operation and Maintenance of equipment to prevent oil discharges.

Yes X No --- N/A --

(2) Applicable pollution control laws, rules, and regulations.

Yes X No N/A

Describe procedures employed for instruction:

Each employee is trained in proper operating techniques on equipment within their job function.

Training is conducted through HSE meetings and instructional processes utilizing Halliburton or other video presentations or by special vendor or clients presentations or training materials.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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- B. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. Yes _X_ No ___ N/A ___

Describe briefing program:

HSE meetings are utilized to review the SPCC plan on an annual basis as well as Emergency Response Plan, and more frequently as required.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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SPCC PLAN, PART II, ALTERNATE A DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION)

A. Facility Drainage

1. Drainage from diked storage areas is controlled as described below (include operating description of valves, pumps, ejectors, etc.). *(Note: Flapper-type valves should not be used.)*

Contained areas for bulk LGC and chemicals are visually checked to establish quantity, pH is checked, chemicals are neutralized if necessary and then emptied using vacuum trucks for appropriate disposal. Contained areas for bulk oil are visually inspected on a regular basis and any stormwater accumulation removed by vacuum truck for appropriate disposal. Documentation of disposal is kept in environmental file.

2. Drainage from undiked areas is controlled as described below (include description of ponds, lagoons, or catchment basins and methods of retaining and returning oil to facility).

All undiked areas are visually inspected for spills or leaks which are immediately cleaned up and material properly disposed of.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

City: FARMINGTON

State: NEW MEXICO

Zip: 87402

PART II, ALTERNATE A, DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION) (Continued)

3. The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open water course is as described below (include description of inspection for pollutants and method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment No. 3.)

All containment is regularly pumped out by vacuum truck and disposed of under licensed waste management contractors. No water collected in containment is released to storm drain or water course.

B. Bulk Storage Tanks

1. Describe tank design, materials of construction, fail-safe engineering features, and if needed, corrosion protection.

LGC Tank - Steel with Steel lines - above ground and within secondary containment ; Shop tanks - Steel with gravity feed discharge - above ground - in secondary containment .

2. Describe secondary containment design, construction materials, and volume.

LGC Tank - concrete containment

Shop Tanks - concrete ground level trough with locked discharge valve

Used pump oil tank - steel tank with Concrete containment

Used motor oil tank - steel tank with steel containment

3. Describe tank inspection methods, procedures, and record keeping.

Visual inspections are completed regularly with annual tank integrity inspections documented and filed.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

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Zip: 87402

PART II, ALTERNATE A, DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION) (Continued)

4. Internal heating coil leakage is controlled by one or more of the following control factors.

(a) Monitoring the steam return or exhaust lines for oil.
Describe monitoring procedure.

N/A__X__

(b) Passing the steam return or exhaust lines through a settling tank, skimmer or other separator system.
N/A__X__

(c) Installing External heating systems.

N/A__X__

5. Disposal facilities for plant effluents discharged into navigable waters are observed frequently for indication of possible upsets which may cause an oil spill event.

Describe method or frequency of observations.

N/A

C. Facility Transfer Operations, Pumping, and In-Plant Process

1. Corrosion protection for buried pipelines.

(a) Pipelines are wrapped and coated to reduce corrosion.

Yes ____ No ____ N/A _X__

(b) Cathodic protection is provided for pipelines if determined necessary by electrolytic testing.

Yes ____ No ____ N/A _X__

(c) When a pipeline section is exposed, it is examined and corrective action taken as necessary.

Yes ____ No ____ N/A _X__

2. Pipeline terminal connections are capped or

Yes ____ No ____ N/A

blank-flanged and marked if the pipeline is not in service or on standby service for extended periods.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

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PART II, ALTERNATE A, DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION) (Continued)

3. Pipe supports are designed to minimize abrasion Yes ☒ No ☐ N/A ☐

and corrosion and allow for expansion and contraction.

4. Describe procedures for regularly examining all aboveground valves and pipelines (including flange joints, valve glands and bodies, catch pans, pipeline supports, locking of valves and metal surfaces).

Monthly/Workday inspections are conducted on liquid bulk material systems per Halliburton tiered inspections procedures. Also see visual inspection procedure checklist.

5. Describe procedures for warning vehicles entering the facility to avoid damaging above-ground piping.

Verbal warning before entry to facility.

D Facility Tank Car and Tank Truck Loading/Unloading Rack

Tank car and tank truck loading/unloading occurs at the facility. If yes, complete 1 through 5 below. Yes ☒ No ☐ N/A ☐

1. Loading/unloading procedures meet the minimum requirements and regulations of the Department of Transportation. Yes ☒ No ☐ N/A ☐

2. The unloading area has a quick drainage system. Yes ☐ No ☒ N/A ☐

3. The containment system will hold the maximum capacity of any single compartment of a tank truck loaded/unloaded in the plant. Yes ☒ No ☐ N/A ☐

Describe containment system design, construction materials, and volume.

The bulk loading area is constructed on a containment structure, loading/unloading is only performed by trained personnel utilizing proper procedures. Spill equipment is available to contain spills.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

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PART II, ALTERNATE A, DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION) (Continued)

4. An interlocked warning light, a physical barrier system, or warning signs are provided in loading/unloading areas to prevent vehicular departure before disconnect or transfer lines. Yes ☒ No ☐ N/A ☐

Describe methods, procedures, and/or equipment used to prevent premature vehicular departure.

Signs are used as well as supervisory inspection and review. Only incoming delivery requires connection to the load lines and this is done by contract delivery under direct supervision of facility personnel trained in the proper operation of the chemical facility.

5. Drains and outlets on tank trucks and tank cars are checked for leakage before loading/unloading or departure. Yes ☒ No ☐ N/A ☐

E. Security

1. Plants handling, processing, or storing oil are fenced. Yes ☒ No ☐ N/A ☐
2. Entrance gates are locked and/or guarded when the plant is unattended or not in production. Yes ☒ No ☐ N/A ☐
3. Any valves which permit direct outward flow of a tank's contents are locked closed when in non-operating or standby status. Yes ☒ No ☐ N/A ☐
4. Starter controls on all oil pumps in non-operating or standby status are
- a. locked in the off position Yes ☐ No ☒ N/A ☐
- b. locked at site accessible only to

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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authorized personnel

Yes ☒ No ☐ N/A ☐

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

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PART II, ALTERNATE A, DESIGN AND OPERATING INFORMATION ONSHORE FACILITY (EXCLUDING PRODUCTION) (Continued)

5. Discussion of Items 1 through 4 as appropriate.

Facility is manned or personnel are on call 24 hours a day 365 days a year. All controls are either located inside buildings or are locked out when not in use, inside a fenced area.

6. Discussion of the lighting around the facility.

The facility is adequately lighted to meet safety and security needs.

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

City: FARMINGTON

State: NEW MEXICO

Zip: 87402

SPCC PLAN, ATTACHMENT NO. 1

SPILL HISTORY

1. Date Volume Cause 10-11-2000-there was a 200 gallon LGC spill that was contained within a secondary containment.

Corrective Action Taken: Locks Spill was properly cleaned and disposed.

Plans for Preventing Recurrence: Locks have been placed on load lines to prevent a reoccurrence.

2. Date Volume Cause: 12-7-2000 there was a 100 gallon acid spill into the city sewer system.

Corrective Action Taken: BE-6 was taken to the sewer treatment plant and the water was treated prior to entering the treatment plant. All remaining fluids on site were Ph balanced and disposed.

Plans for Preventing Reoccurrence

3. Date Volume Cause

Corrective Action Taken

Plans for Preventing Reoccurrence

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

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State: NEW MEXICO

Zip: 87402

MULTI-LEVEL MONITORING SYSTEM Tiered Inspection

Processes and practices implemented for environmental compliance, proper waste management, waste minimization, preventing pollution and other sound environmental reasons are oftentimes difficult to maintain. This Multi-level Monitoring system can be used to ensure the processes are on-going. It will not, in itself, cause compliance, but does monitor daily, weekly, or monthly activities that are required. The following steps are provided as guidance for developing a multi-level monitoring system for your facility:

1. Define "Work Areas" within the facility.
2. Determine responsible persons for those "Work Areas".
3. Develop Daily/ Weekly/ Monthly inspection checklists for each "Work Area".
4. Assign a responsible person for completing the, "Work Area" checklist.
5. The person responsible for the facility, or assignee, will perform a weekly/monthly inspection in which monitoring and documentation of the effectiveness and completion of the work area checklist is determined.
6. An action plan is developed to accomplish the deficiencies discovered in the weekly/monthly inspection. The action plan should consist of corrective actions, timelines and responsible persons.
7. Follow-up on the action plan to ensure completion of the corrective actions. This could occur during the next scheduled inspection.
8. Document the corrections upon completion- very important.

DEFINITION OF WORK AREAS:

Stimulation Laboratory
Maintenance Shop
Washrack and Oil/water Separator
Chemical Warehouse
Parking Areas and Yard
Bulk Plant- Cement/Sand
Logging
Pump Packing Building
LGC Plant
Empty Container Storage Areas
Paint Shop

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Facility Location: 4109 EAST MAIN ST

City: FARMINGTON

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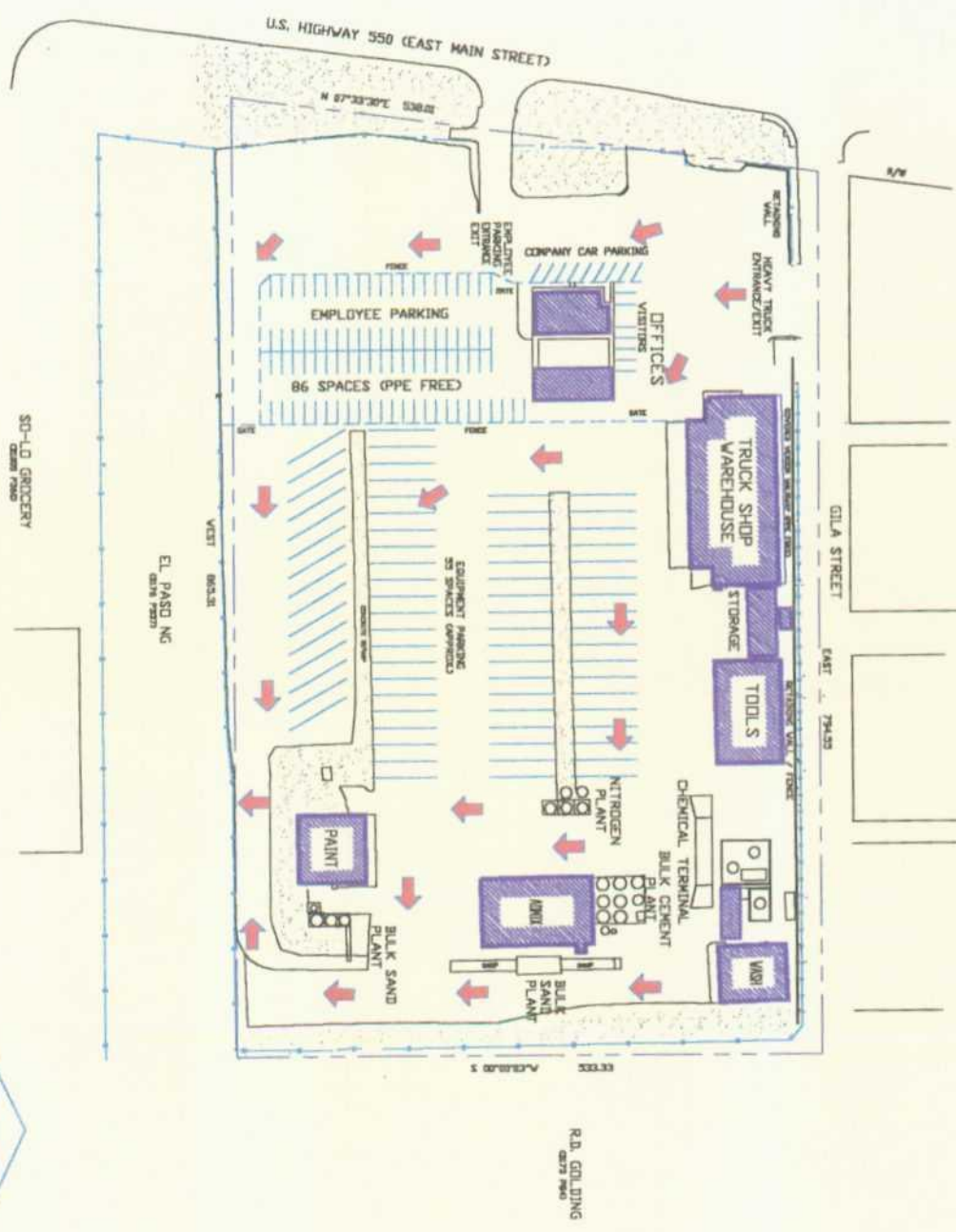
Zip: 87402

September, 2000

1
CISW

1"=50'

STORM WATER FLOW DIAGRAM - FARMINGTON



SO-LO GROCERY
CROWN POND

EL PASO NG
CROWN POND



CISW

STORM WATER FLOW DIAGRAM
HALLIBURTON ENERGY SERVICES
FARMINGTON, N.M.
SHEET 01 OF 01
DATE 01-20-20

HALLIBURTON
NORTH AMERICA RESEARCH SERVICES

NO.	DESCRIPTION	DATE

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SHARED SERVICES SUPERVISOR MONTHLY TIER II INSPECTION

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/GPI NO.	DATE
1.1	DOES FACILITY LOOK NEAT AND CLEAN TO THE PUBLIC?					
1.2	ARE WORK AREAS CLEAN AND FREE OF CHEMICAL OR OIL SPILLS?					
1.3	ARE PARTS STORAGE AREAS NEATLY ORGANIZED?					
1.4	ARE WORK AREAS FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.6	ARE "NO SMOKING" SIGNS POSTED AS REQUIRED?					
1.7	ARE ALL REQUIRED INSPECTIONS PERFORMED AND DOCUMENTED?					
1.8	IS OIL WATER SEPARATOR CLEAN AND NEAT WITH NO TRASH OR VISIBLE STAINING ON GROUND?					
1.9	ARE ALL SECONDARY CONTAINMENTS DRY IN WORKING CONDITION AND FREE OF TRASH?					

SHARED SERVICES SUPERVISOR MONTHLY TIER II INSPECTION

FACILITY LOCATION: _____

DATE: _____ TIME: _____

INSPECTOR: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.10	IS GRIT DRYING SLAB CLEAN WITH NO TRASH AND PROPERLY MANAGED?								
1.11	ARE VEHICLE/TRAILER PARKING AREAS CLEAN AND FREE OF OIL SPILLS?								
2.0	FIRE EXTINGUISHERS	YES	NO	COMMENTS	CA/CP/NO.	DATE			
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?								
2.2	UNOBSTRUCTED ACCESS?								
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED?								
2.4	SIGN INDICATING LOCATION OF EXTINGUISHER?								
3.0	PRODUCT/WASTE MANAGEMENT	YES	NO	COMMENTS	CA/CP/NO.	DATE			
3.1	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?								
3.2	ARE EMPTY CHEMICAL CONTAINERS PROPERLY MANAGED (STORAGE, DISPOSAL OR RECYCLING)?								
3.3	ARE FLAMMABLES STORED IN AN APPROVED CABINETS (AEROSOLS, PAINTS & CLEANERS)?								

FACILITY LOCATION:

INSPECTOR:

DATE: _____ TIME: _____

	CIRCLE APPLICATION			Tier I	Tier II	Tier III
1. Name of the applicant						
2. Address of the applicant						
3. City						
4. State						
5. Zip						
6. Date of application						
7. Signature of applicant						
8. Signature of agent						
9. Signature of broker						
10. Signature of principal						
11. Signature of agent						
12. Signature of broker						
13. Signature of principal						
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81. Signature of broker						
82. Signature of principal						
83. Signature of agent			</			

3.4	ARE ALL LIQUID LUBRICANTS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?				
3.5	ARE SECONDARY CONTAINMENTS CLEAN AND FREE OF WATER?				
3.6	ARE WASTE CONTAINERS PROPERLY LABELED WITH LIDS / CAPS IN PLACE ?				
3.7	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?				
3.8	DO TRASH CONTAINERS CONTAIN REGULATED WASTE? (AEROSOL CANS, CHEMICAL BUCKETS, ETC.)				
3.9	ARE SHOP WASTES PROPERLY MANAGED (PLANT TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON, TIRES)?				
3.10	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?				
3.11	ARE NEW AND USED OIL TANKS LABELED?				
3.12	USED ENGINES, PUMPS, IRON STORED OUTSIDE IN A MANNER TO PREVENT STORM WATER POLLUTION?				
3.13	IS pH OF OIL/WATER SEPARATOR MONITORED AND DOCUMENTED WEEKLY?				

SHARED SERVICES SUPERVISOR MONTHLY TIER II INSPECTION

FACILITY LOCATION: _____

DATE: _____ TIME: _____

INSPECTOR: _____

CIRCLE APPLICATION Tier I Tier II Tier III

4.0 EQUIPMENT MAINTENANCE	YES	NO	COMMENTS	CA/CPI NO.	DATE
4.1 ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSOR, MOTORS, & PUMPS)?					
4.2 IS EACH AIR COMPRESSOR EQUIPPED WITH CONDENSATE CAPTURING DEVICE?					
4.3 IS CONDENSATE VESSEL PERIODICALLY CHECKED FOR FLUID LEVELS?					
4.4 ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION, TOOL INSPECTION PROGRAM?					
4.5 ARE BENCH GRINDERS PROPERLY MAINTAINED WITH GUARDS AND WARNING SIGNS?					
4.6 IS PPE AVAILABLE AND USED?					
4.7 DO OVERHEAD HOISTING HOOKS HAVE SAFETY LATCHES?					
4.8 ARE ALL OVERHEAD HOISTING BEAMS AND RAILS RATED AND MARKED ACCORDINGLY?					
4.9 DOES GRIT ACCUMULATION IN TRAPS NEED TO BE REMOVED AND SHIPPED OFFSITE?					
5.0 ELECTRICAL	YES	NO	COMMENTS	CA/CPI NO.	DATE

SHARED SERVICES SUPERVISOR MONTHLY TIER II INSPECTION

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

5.1	ARE ELECTRIC POWER BOXES COVERED?						
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN						
5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?						
5.4	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?						
5.5	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES)						
5.6	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?						
6.0	OTHER SITE SPECIFIC ISSUES	YES	NO	COMMENTS	CA/GPI NO.	DATE	
6.1	ARE ALL WASTE TRACKING DOCUMENTS ROUTED TO ENVIRONMENTAL FILE?						
6.2	ARE EMPLOYEE RIGHT TO KNOW STATIONS AVAILABLE AND CURRENT?						
6.3	IS POLLUTION PREVENTION AND WASTE MINIMIZATION AN ISSUE IN DEPARTMENTAL MEETINGS?						

* REFER TO SPECIFIC WRITTEN PROCEDURES

HSE TIER INSPECTION ADMINISTRATION OFFICES

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0 HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1 DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2 ARE FLOOR AREAS AND CLEAN CARPET FREE OF RIPS AND TEARS.					
1.3 ARE OFFICE SUPPLY STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED?					
1.4 IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5 ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.6 ARE "NO SMOKING" SIGNS POSTED OUTSIDE EACH ENTRANCE?					
1.7 ARE REST ROOM CLEAN?					
1.8 FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?					
2.0 FIRE EXTINGUISHERS					
2.1 PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?					

HSE TIER INSPECTION ADMINISTRATION OFFICES

2.2	UNOBSTRUCTED THREE FEET ACCESS?												
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? IN-HOUSE MONTHLY INSPECTIONS?												
2.4	SIGN INDICATING LOCATION OF EXTINGUISHER?												
3.0	PRODUCT/WASTE MANAGEMENT												
3.1	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?	YES	NO									CA/CPI NO.	DATE
3.2	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, PAINTS & CLEANERS)?												
3.3	ARE ALL CONTAINERS LEAK FREE?												
3.4	ARE FULL/PARTIAL CONTAINERS STORED WITH CAPS OR LIDS IN PLACE?												
3.5	ARE WASTES PROPERLY MANAGED (TRASH, SCRAP IRON, WHITE PAPER, CARDBOARD, COPIER CARTRIDGES)?												
3.6	OUTSIDE PARKING AREAS MANAGED IN A MANNER TO PREVENT STORM WATER POLLUTION?												
3.7	ARE ALL MSDS SHEETS AVAILABLE AT THE COMMUNITY RIGHT TO KNOW STATION & CURRENT?												
4.0	ELECTRICAL	YES	NO									CA/CPI NO.	DATE

HSE TIER INSPECTION ADMINISTRATION OFFICES

4.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED? (COVERED AND NOT BROKEN)									
4.2	ARE WALL SOCKETS IN GOOD CONDITION?									
4.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?									
4.4	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?									
4.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET?									
4.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS)									
4.7	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?									
5.0	OTHER SITE SPECIFIC ISSUES									
5.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?									
5.2	IS POLLUTION PREVENTION & WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?									
5.3	ARE ALL OFFICE FURNITURE, DESKS, CHAIRS, LIGHTS, COMPUTER EQUIPMENT ERGONOMICALLY CORRECT?									

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

MONTHLY PARKING AREAS HSE TIER INSPECTION

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/GPI NO.	DATE
1.1	DO WORK & PARKING AREAS LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	ARE PARKING AREAS CLEAN & FREE OF CHEMICAL OR OIL SPILLS & LEAKS?					
1.3	IS LITTER PICKED UP ON THE YARD, FROM AGAINST THE FENCES, ALONG THE ROAD SURROUNDING THE FACILITY?					
1.4	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE TOOLS, EQUIPMENT, PARTS STORED OFF THE YARD & ON PROPER RACKS WITH PINS/CHAINS?					
1.6	IS THE SAFE MUSTERING AREA CLEARLY MARKED BY PAINT OR SIGNS?					
1.7	ARE "NO SMOKING" SIGNS POSTED AS REQUIRED & THE NO SMOKING POLICY ENFORCED?					
1.8	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ALL ENTRANCES & AT THE GATE?					
1.10	ARE OUTSIDE VEHICLE/TRAILOR PARKING AREAS CLEAN, LITTER FREE & FREE OF OIL SPILLS & LEAKS?					

MONTHLY PARKING AREAS HSE TIER INSPECTION

1.11	ARE STORMWATER SAMPLES GATHERED FROM EACH YARD OUTLET, VISUALLY INSPECTED AND THE INSPECTION FORM PROPERLY FILLED OUT FOR DOCUMENTATION AT LEAST QUARTERLY? (PH, OIL SHEEN, TURBIDITY/CLARITY, SMELL, SIGNED & DATED)					
2.0	FIRE EXTINGUISHERS	YES	NO	COMMENTS	CA/CP/NO.	DATE
2.1	PROPERLY MOUNTED (OFF THE FLOOR OR GROUND & NO MORE THAN 42 " FROM TOP TO THE FLOOR OR GROUND)?					
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?					
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION TAG FILLED OUT?					
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?					
3.0	PRODUCT/WASTE MANAGEMENT	YES	NO	COMMENTS	CA/CP/NO.	DATE
3.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?					
3.2	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?					
3.3	ARE FULL/PARTIAL CONTAINERS STORED WITH BUNGS, CAPS OR LIDS IN PLACE?					
3.4	ARE YARD WASTES PROPERLY MANAGED (PLANT TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON, TIRES)?					

MONTHLY PARKING AREAS HSE TIER INSPECTION

3.5	ARE YARD WASTES PROPERLY MANAGED (USED OIL, USED OILER OIL, SOLVENTS, FILTERS, AEROSOL CANS)?					
3.6	ARE OILY RAGS, OILY GLOVES & OIL SATURATED ABSORBENTS CONTAINERIZED & PROPERLY MANAGED?					
3.7	ARE SPILL RESPONSE KITS ESTABLISHED, INSPECTED, LABELED, MAINTAINED & FREE OF TRASH? CONTENTS MATCH INVENTORY SHEET?					
4.0	EQUIPMENT MAINTENANCE					
4.1	IS PPE AVAILABLE AND USED?	YES	NO	COMMENTS	CA/CP/NO.	DATE
4.2	ARE TRUCKS & OTHER EQUIPMENT PARKED IN DESIGNATED & MARKED PARKING PLACES?					
4.3	ARE NFPA-704 LABELS POSTED AT THE GATE, ON ALL TANKS & AT ALL ENTRANCES TO CHEMICAL STORAGE BUILDINGS?					
5.0	ELECTRICAL					
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?	YES	NO	COMMENTS	CA/CP/NO.	DATE
5.2	ARE OUTSIDE TRUCK PLUG-INS IN GOOD CONDITION? (NOT BROKEN, COVERED, GFI'S AS APPROPRIATE.)					
5.3	ARE ALL BREAKER BOXES MARKED FOR WHAT THEY CONTROL?					

MONTHLY PARKING AREAS HSE TIER INSPECTION

5.4	ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?				
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET?				
5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)				
5.7	IS LIGHTING ADEQUATE TO PREVENT & DETECT SPILLS & LEAKS & FOR SAFE WORKING CONDITIONS?				

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

WEEKLY TIER INSPECTION PARKING AREAS

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____ CIRCLE APPLICATION Tier I Tier II Tier III

1.0	EMPLOYEE PARKING AREA	YES	NO	COMMENTS	GA/CPI NO.	DATE
	IS AREA CLEAN?					
1.1	ARE OIL STAINS CLEANED UP PROMPTLY?					
1.2	IS THE AREA FREE OF TRASH AND DEBRIS?					
1.3	IS THERE STORM WATER COLLECTED IN THE AREA?					
1.4	ARE TRASH CANS PROPERLY COVERED AND LABELED.					
1.5	ARE TRASH CANS EMPTIED?					
1.6	ARE FENCE LINES CLEAN FREE OF TRASH AND DEBRIS?					
1.7	DO FENCE LINES NEED REPAIR?					
1.8	ARE SPILL KITS PROPERLY STOCKED AND IN PLACE?					
1.9						
2.0	TRUCK PARKING AREAS	YES	NO	COMMENTS	GA/CPI NO.	DATE

WEEKLY TIER INSPECTION PARKING AREAS

	IS AREA CLEAN?				
2.1	ARE OIL STAINS CLEANED UP PROMPTLY?				
2.2	ARE THERE ANY CHEMICAL SPILLS OR LEAKS?				
2.3	IS THE AREA FREE OF TRASH AND DEBRIS?				
2.4	IS THERE STORM WATER COLLECTED IN THE AREA?				
2.5	ARE TRASH CANS PROPERLY COVERED AND LABELED.				
2.6	ARE TRASH CANS EMPTIED?				
2.7	ARE FENCE LINES CLEAN FREE OF TRASH AND DEBRIS?				
2.8	DO FENCE LINES NEED REPAIR?				
2.9	ARE SPILL KITS PROPERLY STOCKED AND IN PLACE?				
2.10					

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

E-TECH LAB MONITORING TIER INSPECTION

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____ CIRCLE APPLICATION Tier I Tier II Tier III

1.0 HOUSEKEEPING	YES	NO	Comments	CA/QP/NO.	DATE
1.1 DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2 IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3 ARE PARTS STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.4 ARE CHEMICAL, OIL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.5 IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.6 IS AREA LITTER FREE, BOTH INSIDE AND OUTSIDE?					
1.7 ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.8 ARE "NO SMOKING" SIGNS POSTED AS REQUIRED? IS "NO SMOKING" INSIDE POLICY ENFORCED?					

E-TECH LAB MONITORING TIER INSPECTION

1.9	IS PPE (EYE PROTECTION) USE SIGNS POSTED OUTSIDE ENTRANCES?					
2.0	FIRE EXTINGUISHERS	YES	NO	Comments	CA/GPI NO.	DATE
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?					
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?					
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED BY 3RD PARTY? INSPECTED EVERY 30 DAYS IN-HOUSE?					
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?					
3.0	PRODUCT/WASTE MANAGEMENT	YES	NO	Comments	CA/GPI NO.	DATE
3.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?					
3.2	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?					
3.3	ARE FLAMMABLES/COMBUSTIBLES STORED IN AN APPROVED CABINET (AEROSOLS, PAINTS & CLEANERS)?					
3.4	ARE ALL OZONE DEPLETING CHEMICALS AND AEROSOLS PHASED OUT OF USE & DISPOSED OF PROPERLY?					

E-TECH LAB MONTHLY TIER INSPECTION

EQUIPMENT MAINTENANCE		YES	NO	Comments	CA/CPI NO.	DATE
4.0	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?					
4.1						
4.2	IS PPE AVAILABLE AND USED?					
4.3	IS PORTABLE LADDER INSPECTED AT LEAST QUARTERLY WITH DOCUMENTATION TAG?					
5.0	ELECTRICAL					
5.1	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN)					
5.2	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?					
5.3	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, GROUND PLUG INTACT)					
5.4	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?					
6.0	OTHER SITE SPECIFIC ISSUES					
6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED PROPERLY? (AT EACH TELEPHONE)					

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.
UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

PAINT SHOP MONTHLY TIER INSPECTION

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0 HOUSEKEEPING	YES	NO	COMMENTS	CAUTION NO.	DATE
1.1 DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2 IS AREA CLEAN AND FREE OF CHEMICAL, PAINT, SOLVENT OR OIL SPILLS? FLOORS CLEAN?					
1.3 ARE PARTS STORAGE AREAS NEATLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.4 ARE CHEMICAL, OIL & EQUIPMENT STORAGE AREAS NEATLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.5 IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.6 ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.7 ARE "NO SMOKING" SIGNS POSTED OUTSIDE ALL ENTRANCES & AS REQUIRED IN FLAMMABLES AREAS?					
1.8 ARE HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR WORN AS REQUIRED ?					
1.9 ARE OUTSIDE EQUIPMENT STORAGE AREAS CLEAN AND FREE OF OIL, PAINT, SOLVENT SPILLS?					

PAINT SHOP MONTHLY TIER INSPECTION

1.10	IS FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?					
2.0	FIRE EXTINGUISHERS	YES	NO	COMMENTS	CA/CP/INO.	DATE
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?					
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?					
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED BY 3RD PARTY? INSPECTED EVERY 30 DAYS IN-HOUSE?					
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?					
3.0	PRODUCT/WASTE MANAGEMENT	YES	NO	COMMENTS	CA/CP/INO.	DATE
3.1	IS THE PAINT BOOTH AIR PERMIT POSTED AND IS IT CURRENT?					
3.2	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?					
3.3	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?					
3.4	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?					
3.5	DO ALL EMPTY CONTAINERS HAVE PRODUCT LABELS OR PROPERLY MARKED?					

PAINT SHOP MONTHLY TIER INSPECTION

3.6	ARE EMPTY CONTAINERS PROPERLY MANAGED? (STORAGE, DISPOSAL, RECYCLING)				
3.7	ARE FLAMMABLES/COMBUSTIBLES STORED IN AN APPROVED CABINET (AEROSOLS, PAINTS & CLEANERS)?				
3.8	ARE ALL LIQUID CHEMICALS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?				
3.9	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER OR OTHER LIQUIDS?				
3.10	ARE ALL TANKS & CONTAINERS LEAK FREE?				
3.11	ARE FULL/PARTIAL CONTAINERS STORED WITH BUNGS, CAPS OR LIDS IN PLACE?				
3.12	ARE PAINT SHOP WASTES PROPERLY MANAGED (PAINT, RUBBER PRODUCTS, SCRAP IRON, TIRES, SOLVENTS, PAINT WASTES, AEROSOL CANS)?				
3.13	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?				
3.14	ARE ALL MSDS SHEETS AVAILABLE AT THE COMMUNITY RIGHT TO KNOW STATION & CURRENT?				
3.15	SPILL RESPONSE KIT ESTABLISHED, INSPECTED, LABELED, TRASH FREE & MAINTAINED? CONTENTS MATCH INVENTORY SHEET?				

PAINT SHOP MONTHLY TIER INSPECTION

3.16	ARE RESPIRATORS BEING INSPECTED & STORED PROPERLY ON A MONTHLY BASIS WITH DOCUMENTATION?					
4.0 EQUIPMENT MAINTENANCE						
4.1	IS A PROPERLY INSTALLED AND MAINTAINED PAINT BOOTH IN USE?	YES	NO	COMMENTS	CA/CPI NO.	DATE
4.2	ARE PAINT BOOTH FILTERS PROPERLY MAINTAINED? DISPOSED OF PROPERLY?					
4.3	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSORS, MOTORS, & PUMPS)?					
4.4	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?					
4.5	ARE PROPER RESPIRATOR PPE AVAILABLE & USED?					
4.6	HAVE ALL EMPLOYEES BEEN PROPERLY RESPIRATOR FIT TESTED? MEDICAL QUESTIONNAIRE?					
4.7	EMERGENCY EYE WASH STATION TAGGED, PROPERLY MAINTAINED, INSPECTED WEEKLY & HAS FREE ACCESS?					
4.8	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?					
5.0 ELECTRICAL						
5.1	DOES THE PAINTING AREA, PAINT BOOTH HAVE PROPERLY INSTALLED EXPLOSION PROOF LIGHTING, SWITCHES, ETC.?	YES	NO	COMMENTS	CA/CPI NO.	DATE

PAINT SHOP MONTHLY TIER INSPECTION

5.2	ARE ELECTRIC POWER BOXES COVERED, CLOSED?					
5.3	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN)					
5.4	ARE ALL BREAKER BOXES MARKED FOR WHAT THEY CONTROL?					
5.5	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?					
5.6	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?					
5.7	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL REPAIR?					
5.8	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, GROUND PLUG INTACT)					
5.9	ARE OVERHEAD LIGHT BULBS COVERED & EXPLOSION PROOF AS REQUIRED?					
6.0	OTHER SITE SPECIFIC ISSUES					
6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT THE TELEPHONE?					
6.2	IS POLLUTION PREVENTION & WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?					

PAINT SHOP MONTHLY TIER INSPECTION

6.3	UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.					
6.4	UPON COMPLETION OF CORRECTIVE ACTIONS, DATE EACH CORRECTION ON THE FORM.					

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.
 UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

MONTHLY TIER INSPECTION FRAC PUMP PACKING SHOP

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/GPI NO.	DATE
1.1	IS THE PUMP PACKING AREA CLEAN, FREE OF OIL SPILLS AND LOOKS NEAT AND CLEAN?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE PARTS STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED? CLEAN?					
1.4	ARE CHEMICAL, OIL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED? CLEAN?					
1.5	ARE WORK BENCHES CLEARED AND CLEAN?					
1.6	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.7	ARE TOOLS, EQUIPMENT, PARTS STORED OFF THE FLOOR AND ON PROPER RACKS AND PROPERLY SECURED?					
1.8	IS THE BREAK ROOM CLEAN & LITTER FREE?					
1.9	ARE EXIT SIGNS POSTED AT ALL EXITS?					

MONTHLY TIER INSPECTION FRAC PUMP PACKING SHOP

1.10	ARE OUTSIDE AREAS IN FRONT OF BAY CLEAN, LITTER FREE & FREE OF OIL SPILLS?						
1.11	ARE "NO SMOKING" SIGNS POSTED OUTSIDE EACH ENTRANCE & AS REQUIRED?						
1.12	ARE HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USED WHEN WORKING IN THIS SHOP?						
1.13	ARE ALL FIRST AID STATIONS PROPERLY SUPPLIED & MOUNTED?						
2.0	FIRE EXTINGUISHERS	YES	NO	COMMENTS	CA/CP/NO.	DATE	
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?						
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?						
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
3.0	PRODUCT/WASTE MANAGEMENT	YES	NO	COMMENTS	CA/CP/NO.	DATE	
3.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?						

MONTHLY TIER INSPECTION FRAC PUMP PACKING SHOP

3.2	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?				
3.3	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, STARTING FLUID, PAINTS & CLEANERS)?				
3.4	ARE ALL LIQUID CHEMICALS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?				
3.5	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER & OTHER LIQUIDS?				
3.6	ARE SHOP WASTES PROPERLY MANAGED (TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON)?				
3.7	ARE SHOP WASTES PROPERLY MANAGED (USED OIL, USED OILER OIL, SOLVENTS, FILTERS, AEROSOL CANS)?				
3.8	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?				
3.9	ARE SPILL RESPONSE KITS ESTABLISHED, INSPECTED, LABELED, MAINTAINED & LITTER FREE? CONTENTS MATCH INVENTORY SHEET?				
4.0	EQUIPMENT MAINTENANCE	YES	NO	COMMENTS	CA/CP NO. DATE
4.1	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?				
4.2	ARE BENCH GRINDERS PROPERLY MAINTAINED?				

MONTHLY TIER INSPECTION FRAC PUMP PACKING SHOP

4.3	IS SPECIAL PPE AVAILABLE AND USED FOR BENCH GRINDER?								
4.4	DO OVERHEAD HOIST HOOKS HAVE SAFETY LATCHES?								
4.5	ARE ALL OVERHEAD HOIST BEAMS AND RAILS RATED AND MARKED ACCORDINGLY?								
4.6	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?								
4.7	ARE SLINGS/LIFTING CHAINS/CHAIN SLINGS TAGGED & INSPECTED MONTHLY?								
5.0	ELECTRICAL								
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?								
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (NOT BROKEN)								
5.3	ARE ALL BREAKER BOXES MARKED FOR WHAT THEY CONTROL?								
5.4	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?								
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?								

MONTHLY TIER INSPECTION FRAC PUMP PACKING SHOP

5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)						
5.7	IS LIGHTING ADEQUATE TO PREVENT/DETECT SPILLS AND FOR SAFE WORKING CONDITIONS?						
6.0	OTHER SITE SPECIFIC ISSUES						
6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?	YES	NO	COMMENTS	CA/CPI NO.	DATE	
6.2	POLLUTION PREVENTION/WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?						
6.3	UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.						
6.4	UPON COMPLETION OF CORRECTIVE ACTIONS, DATE EACH CORRECTION ON THE FORM.						

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Truck Maintenance Shop Monthly Tier Inspection

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE PARTS STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.4	ARE OIL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.5	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.6	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.7	ARE OUTSIDE AREAS IN FRONT OF BAY CLEAN, LITTER FREE & FREE OF OIL SPILLS?					
1.8	ARE "NO SMOKING" SIGNS POSTED OUTSIDE EACH ENTRANCE & AS REQUIRED? NO SMOKING POLICY ENFORCED?					
1.9	ARE HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ENTRANCES?					

Truck Maintenance Shop Monthly Tier Inspection

1.10	ARE INSPECTION OF TRUCK CAP FIRST AID KITS INCLUDED AS PART OF THE PM INSPECTIONS?						
1.11	ARE VEHICLE/TRAILOR PARKING AREAS CLEAN, LITTER FREE AND FREE OF OIL SPILLS?						
2.0	FIRE EXTINGUISHERS						
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?	Yes	No	Comments	CA/CPI No.	Date	
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?						
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED BY 3RD PARTY? INSPECTED EVERY 30 DAYS IN-HOUSE?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
2.5	ARE INSPECTION OF TRUCK CAP FIRE EXTINGUISHERS INCLUDED AS PART OF THE PM INSPECTIONS?						
3.0	PRODUCT/WASTE MANAGEMENT						
3.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?	Yes	No	Comments	CA/CPI No.	Date	
3.2	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?						

3.3	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?					
3.4	ARE EMPTY CONTAINERS PROPERLY MANAGED? (STORAGE, DISPOSAL, RECYCLING)					
3.5	ARE FLAMMABLES/COMBUSTIBLES STORED IN AN APPROVED CABINET (AEROSOLS, STARTING FLUID, PAINTS & CLEANERS)?					
3.6	ARE ALL OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?					
3.7	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER OR OTHER LIQUIDS?					
3.8	ARE ALL TANKS & CONTAINERS LEAK FREE?					
3.9	ARE FULL/PARTIAL CONTAINERS STORED WITH BUNGS, CAPS OR LIDS IN PLACE?					
3.10	ARE SHOP WASTES PROPERLY MANAGED (PLANT TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON, TIRES)?					
3.11	ARE SHOP WASTES PROPERLY MANAGED (USED OIL, USED OILER OIL, SOLVENTS, FILTERS, AEROSOL CANS)?					
3.12	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?					

Truck Maintenance Shop Monthly Tier Inspection

3.13	ARE USED BATTERIES STORED OUT OF WEATHER, CLOSED AND TO PREVENT SHORT CIRCUIT?						
3.14	IS USED BATTERY STORAGE AREA MARKED, LABELED WITH "CORROSIVES, NO SMOKING, EYE PROTECTION REQUIRED"?						
3.15	ARE JUNK TIRES DISPOSED OF PROPERLY AND TIMELY?						
3.16	ARE JUNK HOSES STORED PROPERLY?						
3.17	SPILL RESPONSE KIT ESTABLISHED, INSPECTED, LABELED, MAINTAINED & FREE OF TRASH? CONTENTS MATCH INVENTORY SHEET?						
3.18	ARE ALL MSDS SHEETS AVAILABLE AT THE COMMUNITY RIGHT TO KNOW STATION & CURRENT?						
3.19	EMERGENCY EYE WASH PROPERLY MAINTAINED, TAGGED, INSPECTED WEEKLY WITH FREE ACCESS?						
4.0	EQUIPMENT MAINTENANCE						
4.1	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSORS, MOTORS, & PUMPS)?						
4.2	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?						
4.3	ARE BENCH GRINDERS PROPERLY MAINTAINED?						

Truck Maintenance Shop Monthly Tier Inspection

4.4	IS PPE AVAILABLE AND USED WHEN USING THE GRINDER?						
4.5	DO OVERHEAD HOIST HOOKS HAVE SAFETY LATCHES?						
4.6	ARE ALL OVERHEAD HOIST BEAMS AND RAILS RATED AND MARKED ACCORDINGLY? HAVE THE ANNUAL LOAD TEST BEEN PERFORMED?						
4.7	WELDING/CUTTING EQUIPMENT PROPERLY MAINTAINED/EQUIPPED? (FLASHBACK ARRESTORS, HOSE CLAMPS, HOSES)						
4.8	ARE COMPRESSED GAS CYLINDERS (EMPTY & FULL) PROPERLY TAGGED, LABELED, STORED?						
4.9	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?						
4.10	ARE SLINGS/LIFTING CHAINS/CHAIN SLINGS TAGGED & INSPECTED MONTHLY?						
4.11	ARE HYDRAULIC JACKS TAGGED & INSPECTED MONTHLY?						
5.0	ELECTRICAL	Yes	No	Comments	CA/CPI No.	Date	
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED? (COVERED AND NOT BROKEN)						
5.2	ARE WALL SOCKETS IN GOOD CONDITION?						

Truck Maintenance Sheet Monthly Tier Inspection

5.3	ARE ALL BREAKER BOXES MARKED FOR WHAT THEY CONTROL?						
5.4	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?						
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?						
5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, GROUND PLUG INTACT)						
5.7	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?						
6.0	OTHER SITE SPECIFIC ISSUES						
6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?						
6.2	IS POLLUTION PREVENTION & WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?						

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.
UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Wash Rack Monthly Tier Inspection

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CPI NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.4	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.5	ARE OUTSIDE AREAS IN FRONT OF BAY CLEAN, LITTER FREE & FREE OF OIL SPILLS?					
1.6	ARE "NO SMOKING" SIGNS POSTED OUTSIDE EACH ENTRANCE?					
1.7	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ALL ENTRANCES?					
2.0	FIRE EXTINGUISHERS					
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?					

Wash Rack Monthly Tier Inspection

2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?						
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
3.0	WASTE MANAGEMENT					CA/CPI No.	Date
3.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?						
3.2	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?						
3.3	ARE WASTES PROPERLY MANAGED (TRASH, SCRAP METAL, AEROSOLS, ETC.)?						
3.4	ARE WASH RACK GRIT & GRAY WATER PROPERLY STORED & MANAGED?						
3.5	HAS WASH RACK GRIT ACCUMULATION IN TRAPS BEEN PROPERLY REMOVED & SHIPPED OFFSITE?						
3.6	ARE OILY RAGS & OIL SATURATED ABSORBENTS CONTAINERIZED & PROPERLY MANAGED?						
3.7	ARE ALL PROCESS WATER DISCHARGES DIRECTED TO SEWER SUMP SYSTEM?						

Wash Rack Monthly Tier Inspection

3.8	HAS PROCESS WATER BEEN PREVENTED FROM ENTERING THE ENVIRONMENT? WASH WATER PREVENTED FROM LEAVING THE WASH RACK?	Yes	No	Comments	CA/CPI No.	Date
4.0 EQUIPMENT MAINTENANCE						
4.1	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSORS, MOTORS, & PUMPS)?					
4.2	IS EACH AIR COMPRESSOR OIL LEAK FREE?					
4.3	IS PPE USED DURING WASHING OPERATIONS?					
4.4	ARE PRESSURE WASHER WANDS IN PROPER WORKING CONDITION?					
4.5	ARE OIL/WATER SEPARATOR CLEAN, SKIMMED, SKIMMED OIL RECYCLED & SEPARATOR PROPERLY MANAGED WITH DAILY INSPECTIONS COMPLETED?					
4.6	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?					
5.0 ELECTRICAL						
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?	Yes	No	Comments	CA/CPI No.	Date
5.2	ARE WALL SOCKETS IN GOOD CONDITION & GFI's IN USE? (COVERED AND NOT BROKEN)					

Wash Rack Monthly Tier Inspection

5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?					
5.4	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?					
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?					
5.6	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL REPAIR?					
5.7	IS LIGHTING ADEQUATE TO PREVENT/DETECT SPILLS AND SAFETY HAZARDS?					
6.0	OTHER SITE SPECIFIC ISSUES	Yes	No	Comments	CA/CPI No.	Date
6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?					
6.2	IS POLLUTION PREVENTION & WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?					

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.
 UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Materials Warehouse Monthly Tier Inspection

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED? CLEAN?					
1.4	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.6	ARE "NO SMOKING" SIGNS POSTED OUTSIDE EACH ENTRANCE & AS REQUIRED IN FLAMMABLES STORAGE AREAS?					
1.7	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ALL ENTRANCES?					
1.8	ARE OUTSIDE VEHICLE/TRAILOR PARKING AREAS CLEAN AND FREE OF OIL SPILLS?					

Materials Warehouse Monthly Tier Inspection

1.9	ARE CHEMICAL SOLUTIONS IN THE EMERGENCY EYE WASH STATION WITHIN CURRENT USAGE DATES?						
1.10	FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?						
2.0	FIRE EXTINGUISHERS						
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42 " FROM TOP TO THE FLOOR)?	Yes	No	Comments	CA/CPJ No.	Date	
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?						
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
3.0	PRODUCT/WASTE MANAGEMENT						
3.1	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?	Yes	No	Comments	CA/CPJ No.	Date	
3.2	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, STARTING FLUID, PAINTS & CLEANERS)?						
3.3	ARE ALL CONTAINERS LEAK FREE?						

Materials Warehouse Monthly Tier Inspection

3.4	ARE WASTES PROPERLY MANAGED (TRASH, PAINT, SCRAP METAL, PALLETS, WOOD, CARDBOARD, ETC.)?						
3.5	IS CARDBOARD RECYCLED?						
3.6	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?						
3.7	ARE FULL & EMPTY PROPANE BOTTLES FOR THE FORKLIFT PROPERLY MANAGED?						
3.8	ARE OUTSIDE STORAGE AREAS MANAGED IN A MANNER TO PREVENT STORM WATER POLLUTION?						
3.9	ARE ALL PALLETS STORED IN A DESIGNATED, MARKED STORAGE AREA?						
3.10	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?						
3.11	ARE NFPA-704 LABELS POSTED OUTSIDE EACH ENTRANCE?						
4.0	EQUIPMENT MAINTENANCE	Yes	No	Comments	CA/CPI No.	Date	
4.1	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?						
4.2	IS PPE AVAILABLE AND USED?						

Materials Warehouse Monthly Tier Inspection

4.3	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?	Yes	No	Comments	CA/CPI No.	Date
5.0	ELECTRICAL					
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?					
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN)					
5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?					
5.4	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?					
5.5	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL REPAIR?					
5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)					
5.7	IS LIGHTING PROPER/ADDEQUATE TO PREVENT/DETECT HAZARDS, SPILLS & ACCIDENTS?					
5.8	ARE ALL LIGHTS WORKING AND COVERED AS REQUIRED?					
6.0	OTHER SITE SPECIFIC ISSUES	Yes	No	Comments	CA/CPI No.	Date

Materials Warehouse Monthly Tier Inspection

ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?									
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UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.
UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Nitrogen Area Monthly Tier Inspection

FACILITY LOCATION: _____

INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0 HOUSEKEEPING		YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, DRIVEWAY CLEAN?					
1.3	ARE CHEMICAL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED & CLEAN?					
1.4	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE "NO SMOKING" SIGNS POSTED AS REQUIRED?					
1.6	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR, HEARING PROTECTION USE SIGNS POSTED AS REQUIRED?					
2.0 FIRE EXTINGUISHERS						
2.1	PROPERLY MOUNTED (OFF THE DRIVEWAY & NO MORE THAN 42 " FROM TOP TO THE DRIVEWAY)?	Yes	No	Comments	CA/CP/No.	Date
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?					

Nitrogen Area Monthly Tier Inspection

2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
3.0	PRODUCT/WASTE MANAGEMENT						
3.1	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?	Yes	No	Comments	CA/CPI No.	Date	
3.2	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, PAINTS & CLEANERS)?						
3.3	ARE ALL TANKS & CONTAINERS LEAK FREE?						
3.4	ARE WASTES PROPERLY MANAGED (PLANT TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON, TIRES)?						
3.5	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?						
3.6	IS THERE AN AWARENESS SIGN POSTED AT THE NITROGEN LOADING AREA "DISCONNECT HOSES BEFORE LEAVING"?						
3.7	ARE STEEL BRAIDED NITROGEN HOSES STORED & USED OFF THE GROUND/PAVEMENT?						
3.8	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?						

Nitrogen Area Monthly Tier Inspection

3.9	DO THE NITROGEN TANKS HAVE NFPA-704 LABELS ON THEM FROM ALL APPROACH DIRECTIONS?						
4.0	EQUIPMENT MAINTENANCE	Yes	No	Comments	CA/CPI No.	Date	
4.1	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?						
4.2	IS ALL NITROGEN PIPING OF GOOD INTEGRITY AND LEAK FREE?						
4.3	IS SPECIAL N2 PPE AVAILABLE AND USED?						
5.0	ELECTRICAL	Yes	No	Comments	CA/CPI No.	Date	
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?						
5.2	ARE OUTSIDE PLUG-INS IN GOOD CONDITION? (COVERED AND NOT BROKEN)						
5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?						
5.4	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?						
6.0	OTHER SITE SPECIFIC ISSUES	Yes	No	Comments	CA/CPI No.	Date	
	POLLUTION PREVENTION/WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?						

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

Nitrogen Area Monthly Tier Inspection

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Cement/Sand Bulk Plant Monthly Tier Inspection

FACILITY LOCATION: _____ INSPECTOR: _____
 DATE: _____ TIME: _____ CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED AND CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	ARE STORAGE AREAS CLEAN, LITTER FREE, NEAT, FREE OF SAND, CHEMICAL OR OIL SPILLS, ETC.?					
1.3	IS WORK AREA CLEAN AND FREE OF SAND, CHEMICAL OR OIL SPILLS?					
1.4	ARE PARTS STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED?					
1.5	ARE EQUIPMENT & CHEMICAL STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED?					
1.6	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.7	IS AREA CEMENT DUST FREE? (NO EVIDENCE OF CEMENT DUST RELEASE)					
1.8	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.9	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR, HEARING PROTECTION USE SIGNS POSTED OUTSIDE ALL ENTRANCES?					

Cement/Sand Bulk Plant Monthly Tier Inspection

1.10	ARE "NO SMOKING" SIGNS POSTED OUTSIDE ALL ENTRANCES & AS REQUIRED IN STORAGE AREAS?						
1.11	FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?						
2.0	FIRE EXTINGUISHERS	Yes	No	Comments	CA/CPI No.	Date	
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?						
2.2	UNOBSTRUCTED, MARKED 3' ACCESS?						
2.3	INSPECTED AND TAGGED WITHIN THE LAST MONTH INHOUSE AND WITHIN THE LAST 12 MONTHS BY AN OUTSIDE VENDOR?						
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?						
3.0	PRODUCT/WASTE MANAGEMENT	Yes	No	Comments	CA/CPI No.	Date	
3.1	ARE ALL TANKS AND PIPING OF GOOD INTEGRITY, "LEAK FREE" & LABELED PROPERLY?						
3.2	ARE PARTIAL PRODUCT CONTAINERS PROPERLY MANAGED?						
3.3	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?						

Cement/Sand Bulk Plant Monthly Tier Inspection

3.4	IS THERE A DESIGNATED, MARKED "PALLET" STORAGE AREA?					
3.5	ARE EMPTY CHEMICAL CONTAINERS PROPERLY MANAGED (DISPOSAL, STORAGE OR RECYCLING)?					
3.6	DO ALL EMPTY CONTAINERS HAVE PRODUCT LABELS OR PROPERLY MARKED?					
3.7	ARE ALL MSDS SHEETS AVAILABLE AT THE BULK PLANT COMMUNITY RIGHT-TO-KNOW STATION & CURRENT?					
3.8	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, STARTING FLUID, PAINTS & CLEANERS)?					
3.9	ARE ALL LIQUID LUBRICANTS & CHEMICALS STORED WITHIN SECONDARY CONTAINMENT?					
3.10	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER OR OTHER LIQUIDS?					
3.11	ARE CEMENT RETURNS & OTHER WASTES PROPERLY MANAGED (DISPOSAL DOCUMENTED, RE-USE OR RECYCLING)?					
3.12	ARE WASTE INVENTORY LOGS CURRENT?					
3.13	IS VENDOR OFF LOADING PROCEDURE IN PLACE AND FOLLOWED?					

Cement/Sand Bulk Plant Monthly Tier Inspection

3.14	ARE NFPA-704 LABELS POSTED AT ALL BUILDING ENTRANCES & ON ALL TANKS WITH PROPER CODES?						
3.15	WARNING SIGN: "DISCONNECT HOSES BEFORE DEPARTURE" POSTED?						
3.16	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ? COVERED IF OUTSIDE?						
3.17	SPILL RESPONSE KIT ESTABLISHED, INSPECTED, LABELED, MAINTAINED & NO TRASH? CONTENTS MATCH INVENTORY SHEET?						
3.18	ARE RESPIRATORS BEING INSPECTED & STORED PROPERLY ON A MONTHLY BASIS WITH DOCUMENTATION?						
4.0	EQUIPMENT MAINTENANCE						
4.1	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSORS, MOTORS, & PUMPS)?						
4.2	ARE AIR COMPRESSORS FREE OF OIL LEAKS?						
4.3	IS THE FORKLIFT PROPERLY INSPECTED AND MAINTAINED? SEAT BELT & FIRE EXTINGUISHER?						
4.4	IS FALL PROTECTION EQUIPMENT AVAILABLE & USED? PROPERLY INSPECTED?						
4.5	ARE GUARD RAILS ON TOP OF ALL TANKS PROPERLY INSTALLED, CORROSION FREE, 2 RAILS & A KICK PLATE, RAILS 42" HIGH, MIDRAIL 21" HIGH?						

Cement/Sand Bulk Plant Monthly Tier Inspection

4.6	LADDERS USED WITH FALL PROTECTION OR A FALL PROTECTION CAGE INSTALLED?					
4.7	ARE CUTTING/WELDING EQUIPMENT PROPERLY STORED, MAINTAINED WITH FLASHBACK ARRESTORS?					
4.8	ARE DUST COLLECTOR MAINTENANCE/INSPECTION PROCEDURES IN PLACE AND FOLLOWED? 30 DAY MINIMUM INSPECTION?					
4.9	ARE LOCK OUT/TAG OUT PROCEDURES AVAILABLE AND FOLLOWED? LOCKOUT TAGS AVAILABLE?					
4.10	IS THERE A CURRENT CONFINED SPACE ENTRY PLAN/PERMIT SYSTEM ON FILE & USED? IS IT UNDERSTOOD?					
4.11	ARE CONFINED SPACE WARNING SIGNS ON ALL TANKS (BULK TANKS & TRUCKS) ?					
4.12	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?					
4.13	BENCH GRINDER PROPERLY MAINTAINED ALONG WITH PROPER PPE AVAILABLE?					
4.14	ARE "HIGH NOISE LEVEL" SIGNS POSTED AND HEARING PROTECTION PROVIDED?					
4.15	IS PPE AVAILABLE, USED AND SIGNS FOR ITS USE PROPERLY POSTED?					

Cement/Sand Bulk Plant Monthly Tier Inspection

4.16	ARE PORTABLE LADDERS TAGGED AND INSPECTED AT LEAST QUARTERLY?							
4.17	ARE SPILL RESPONSE KITS/EQUIPMENT AVAILABLE?							
4.18	ARE WASTE BACKFLOW PREVENTION DEVICES IN PLACE?							
4.19	IS EMERGENCY EYE WASH & SHOWER PROPERLY MAINTAINED, TAGGED, INSPECTED WEEKLY WITH FREE ACCESS?							
5.0	ELECTRICAL	Yes	No	Comments	CA/CPJ No.	Date		
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?							
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN)							
5.4	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?							
5.5	IS THERE PROPER & ADEQUATE LIGHTING PROVIDED INSIDE & OUTSIDE TO PREVENT/DETECT LEAKS & FOR A SAFE WORKING ENVIRONMENT? ARE LIGHTS IN WORKING ORDER?							
5.6	IS ALL ELECTRIC EQUIPMENT PROPERLY GROUNDED?							
5.7	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET & MARKED?							

Cement/Sand Bulk Plant Monthly Tier Inspection

5.8	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)								
6.0	OTHER SITE SPECIFIC ISSUES								
6.1	ARE DUST EMISSIONS PREVENTED (NON-VISIBLE) DURING LOADING/UNLOADING?								
6.2	ARE EMERGENCY TELEPHONE NUMBERS POSTED AT EACH TELEPHONE?								
6.3	ARE OPERATING PROCEDURES DOCUMENTED, COMMUNICATED, UNDERSTOOD AND FOLLOWED?								
6.4	ARE DAILY AND WEEKLY INSPECTION PERFORMED AND ARE THEY CURRENT?								
6.5	ARE WASTE MINIMIZATION/POLLUTION PREVENTION DISCUSSED AT DEPARTMENTAL MEETINGS?								

UPON COMPLETION PLACE A COPY OF THIS FORM IN THE TRACKING BINDER.

UPON COMPLETION OF CORRECTIVE ACTIONS OR FILLING OUT OF A CPI, ENTER DATE FOR EACH IDENTIFIED EACH CORRECTION ON THE FORM.

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CPI NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE CHEMICAL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ergonomically ORGANIZED? CLEAN?					
1.4	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.6	ARE "NO SMOKING" SIGNS POSTED OUTSIDE ALL ENTRANCES & AS REQUIRED AT STORAGE AREAS?					
1.7	ARE HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ALL ENTRANCES?					
1.8	FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?					
2.0	FIRE EXTINGUISHERS					
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?					

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?								
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY INSPECTION IN-HOUSE?								
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?								
3.0	PRODUCT/WASTE MANAGEMENT								
3.1	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?	Yes	No					CA/GPI No.	Date
3.2	ARE EMPTY CHEMICAL CONTAINERS STORED IN A DESIGNATED, MARKED AREA?								
3.3	DO ALL EMPTY CONTAINERS HAVE PRODUCT LABELS OR PROPERLY MARKED?								
3.4	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, PAINTS & CLEANERS)?								
3.5	ARE ALL LIQUID CHEMICALS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?								
3.6	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER OR OTHER LIQUIDS?								
3.7	ARE ALL TANKS & CONTAINERS LEAK FREE?								

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

3.8	ARE FULL/PARTIAL CONTAINERS STORED WITH BUNGS, CAPS OR LIDS IN PLACE?				
3.9	ARE WASTES PROPERLY MANAGED (TRASH, PAINT, RUBBER PRODUCTS, SCRAP METAL, EMPTY CONTAINERS, SOLVENTS, FILTERS, AEROSOL CANS, CARDBOARD, WOOD PALLETS)?				
3.10	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?				
3.11	OUTSIDE STORAGE AREAS MANAGED IN A MANNER TO PREVENT STORM WATER POLLUTION?				
3.12	ARE ALL PALLETS STORED IN A DESIGNATED, MARKED STORAGE AREA?				
3.13	ARE ALL MSDS SHEETS AVAILABLE AT THE COMMUNITY RIGHT TO KNOW STATION & CURRENT?				
3.14	SPILL RESPONSE KIT ESTABLISHED, INSPECTED, LABELED, MAINTAINED & FREE OF TRASH? CONTENTS MATCH INVENTORY SHEET?				
3.15	ARE NFPA-704 LABELS POSTED OUTSIDE ALL ENTRANCES & ON ALL TANKS WITH PROPER HAZARD CODES?				
3.16	ARE K-34 & FE-2 AVAILABLE FOR NEUTRALIZATION PURPOSES?				
3.17	ARE RESPIRATORS BEING INSPECTED & STORED PROPERLY ON A MONTHLY BASIS WITH DOCUMENTATION?				

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

3.18	IS THE HAZARDOUS WASTE STORAGE AREA PROPERLY MANAGED, MARKED, INSPECTED WEEKLY, INSPECTION DOCUMENTED, LOG OF INVENTORY KEPT, WITHIN SECONDARY CONTAINMENT, AND HAS A 180 DAY HW INVENTORY TURNOVER?						
3.19	ARE NON-COMPATIBLE CHEMICALS STORED PROPERLY (i.e. CORROSIVES FROM FLAMMABLES, OXIDIZERS FROM FLAMMABLES, etc.)						
3.20	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?						
3.21	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?						
4.0	EQUIPMENT MAINTENANCE	Yes	No	Comments	CA/CPI No.	Date	
4.1	ARE ALL TANKS AND PIPING OF GOOD INTEGRITY, "LEAK FREE" & LABELED PROPERLY?						
4.2	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSORS, MOTORS, & PUMPS)?						
4.3	ARE EYE WASH & EMERGENCY SHOWER PROPERLY MAINTAINED, TAGGED, INSPECTED WEEKLY WITH FREE ACCESS?						
4.4	IS EACH AIR COMPRESSOR FREE OF OIL LEAKS?						
4.5	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?						

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

4.6	IS PPE AVAILABLE AND USED?						
4.7	ARE CONFINED SPACE WARNING SIGNS POSTED AS REQUIRED? (ON TANKS & TRUCKS WHERE APPLICABLE)						
5.0	ELECTRICAL						
5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?						
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN)						
5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?						
5.4	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?						
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?						
5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)						
5.7	ARE OVERHEAD LIGHTS WORKING AND COVERED AS REQUIRED?						
5.8	ELECTRIC & LIGHTING EXPLOSION PROOF IN THE CHEMICAL TERMINAL & FLAMMABLES STORAGE AREAS?						

Chemical Plant/Storage/Hazardous Waste Area Monthly Tier Inspections

5.9	IS LIGHTING PROPER & ADEQUATE TO PREVENT & DETECT SPILLS & LEAKS AND FOR A SAFE WORK ENVIRONMENT?						
6.0	OTHER SITE SPECIFIC ISSUES	Yes	No	Comments	CA/CPI No.	Date	
6.1	ARE EMERGENCY TELEPHONE NUMBERS POSTED AT EACH TELEPHONE?						
6.2	ARE OPERATING PROCEDURES DOCUMENTED, COMMUNICATED, UNDERSTOOD AND FOLLOWED?						
6.3	ARE DAILY AND WEEKLY INSPECTION PERFORMED AND ARE THEY CURRENT?						
6.4	ARE WASTE MINIMIZATION/POLLUTION PREVENTION DISCUSSED AT DEPARTMENTAL MEETINGS?						

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Cement Head/Break Room Monthly Tier Inspection

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____ CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE PARTS STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED? CLEAN?					
1.4	ARE CHEMICAL, OIL & EQUIPMENT STORAGE AREAS NEATLY, EFFICIENTLY & ERGONOMICALLY ORGANIZED? CLEAN?					
1.5	ARE WORK BENCHES CLEARED AND CLEAN?					
1.6	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.7	ARE HEADS, IRON, MANIFOLDS, ETC. STORED OFF THE FLOOR & ON PROPER RACKS WITH PINS/CHAINS?					
1.8	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.9	ARE "NO SMOKING" SIGNS POSTED OUTSIDE ALL ENTRANCES & AS REQUIRED?					

Cement Head/Break Room Monthly Tier Inspection

1.10	HARDHAT, SAFETY GLASSES, SAFETY FOOTWEAR USE SIGNS POSTED OUTSIDE ALL ENTRANCES?								
1.11	ARE OUTSIDE AREAS IN FRONT OF BAY CLEAN, LITTER FREE & FREE OF OIL SPILLS?								
1.12	FIRST AID STATIONS PROPERLY SUPPLIED & MOUNTED?								
2.0	FIRE EXTINGUISHERS								
2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?	Yes	No					CA/CPI No.	Date
2.2	UNOBSTRUCTED, MARKED THREE FEET ACCESS?								
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? MONTHLY IN-HOUSE INSPECTION?								
2.4	SIGNS INDICATING LOCATION OF EXTINGUISHERS?								
3.0	PRODUCT/WASTE MANAGEMENT								
3.1	ARE CONTAINERS USED FOR TRASH LABELED "TRASH" ?	Yes	No					CA/CPI No.	Date
3.2	IF TRASH CONTAINERS STORED OUTSIDE, ARE LIDS IN PLACE?								

Cement Head/Break Room Monthly Tier Inspection

3.3	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS?					
3.4	ARE EMPTY CONTAINERS MANAGED PROPERLY? (DISPOSAL, STORAGE OR RECYCLING)					
3.5	DO ALL EMPTY CONTAINERS HAVE PRODUCT LABELS OR PROPERLY MARKED?					
3.6	ARE FLAMMABLES STORED IN AN APPROVED CABINET (AEROSOLS, STARTING FLUID, PAINTS & CLEANERS)?					
3.7	ARE ALL LIQUID CHEMICALS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?					
3.8	IS SECONDARY CONTAINMENT CLEAN AND FREE OF WATER OR OTHER LIQUIDS?					
3.9	ARE ALL CONTAINERS LEAK FREE?					
3.10	ARE FULL/PARTIAL CONTAINERS STORED WITH BUNGS, CAPS OR LIDS IN PLACE?					
3.11	ARE WORK AREA WASTES PROPERLY MANAGED (PLANT TRASH, PAINT, RUBBER PRODUCTS, SCRAP IRON, USED OIL, OILER OIL, SOLVENTS, FILTERS, AEROSOL CANS)?					
3.12	ARE OILY RAGS AND OIL SATURATED ABSORBENTS CONTAINERIZED AND PROPERLY MANAGED?					

Cement Head/Break Room Monthly Tier Inspection

3.13	ARE SPILL RESPONSE KITS ESTABLISHED, INSPECTED, LABELED, MAINTAINED & NO TRASH? CONTENTS MATCH INVENTORY SHEET?								
3.14	ARE RESPIRATORS BEING INSPECTED AND DOCUMENTED ON A MONTHLY BASIS & ARE THEY BEING STORED PROPERLY?								
4.0	EQUIPMENT MAINTENANCE								
4.1	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?	Yes	No		Comments		CA/CPI No.		Date
4.2	BENCH GRINDER PROPERLY MAINTAINED?								
4.3	IS PPE AVAILABLE AND USED?								
4.4	DO OVERHEAD HOIST HOOKS HAVE SAFETY LATCHES?								
4.5	ARE ALL OVERHEAD HOIST BEAMS AND RAILS RATED AND MARKED ACCORDINGLY?								
4.6	ARE PORTABLE LADDERS TAGGED & INSPECTED AT LEAST QUARTERLY?								
4.7	ARE SLINGS/LIFTING CHAINS/CHAIN SLINGS TAGGED & INSPECTED MONTHLY?								
5.0	ELECTRICAL								

Cement Head/Break Room Monthly Tier Inspection

5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?									
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (NOT BROKEN)									
5.3	ARE ALL OUTSIDE TRUCK PLUG-INS IN GOOD CONDITION, GFI's, COVERED & NOT BROKEN?									
5.4	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?									
5.5	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?									
5.6	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?									
5.7	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL REPAIR?									
5.8	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)									
5.8	ARE OVERHEAD LIGHTS WORKING AND COVERED AS REQUIRED?									
5.9	IS LIGHTING ADEQUATE TO PREVENT/DETECT SPILLS AND FOR SAFE WORKING CONDITIONS?									
6.0	OTHER SITE SPECIFIC ISSUES	Yes	No	Comments	CA/GPI No.	Date				

Cement Head/Break Room Monthly Tier Inspection

6.1	ARE EMERGENCY RESPONSE NUMBERS POSTED AT EACH TELEPHONE?				
6.2	POLLUTION PREVENTION/WASTE MINIMIZATION DISCUSSED IN DEPARTMENTAL MEETINGS?				

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Lab Monthly Tier Inspection

FACILITY LOCATION: _____ INSPECTOR: _____
 DATE: _____ TIME: _____ CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CP/NO.	DATE
1.1	DOES WORK AREA LOOK NEAT, PAINTED & CLEAN TO THE PUBLIC? TO CUSTOMERS?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR OIL SPILLS, FLOORS CLEAN?					
1.3	ARE PARTS, EQUIPMENT & CHEMICAL STORAGE AREAS EFFICIENTLY, NEATLY & ERGONOMICALLY ORGANIZED?					
1.4	ARE BENCH TOPS CLEAN & CLEARED WHEN NOT IN USE?					
1.5	IS AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.6	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.7	ARE "NO SMOKING" SIGNS POSTED OUTSIDE ALL LAB ENTRANCES?					
1.8	ARE EYE PROTECTION PROTECTION AVAILABLE AND USED PROPERLY IN THE LAB AREA?					
1.9	IS AREA FREE OF CLUTTER AND OTHER FIRE HAZARDS?					

Lab Monthly Tier Inspection

1.10	FIRST AID STATION PROPERLY SUPPLIED & MOUNTED?						
2.0	FIRE EXTINGUISHERS						
2.1	PROPERLY MOUNTED?	Yes	No	Comments	CA/GPI No.	Date	
2.2	UNOBSTRUCTED?						
2.3	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED? CHECKED WITHIN LAST 30 DAYS AND DATE MARKED ON TAG?						
2.4	SIGN INDICATING LOCATION OF EXTINGUISHER?						
3.0	PRODUCT/WASTE MANAGEMENT						
3.1	ARE INCOMING SAMPLES LOGGED IN AND PROPERLY LABELED?	Yes	No	Comments	CA/GPI No.	Date	
3.2	DO ALL PRODUCT, CHEMICAL STORAGE CONTAINERS & LAB CHEMICAL CONTAINERS HAVE PROPER LABELS?						
3.3	ARE FLAMMABLES/COMBUSTIBLES STORED IN AN APPROVED CABINET?						
3.4	ARE CORROSIVES STORED IN A PROPER CORROSIVES STORAGE LOCKER?						

Lab Monthly Tier Inspection

3.5	ARE ALL LIQUID CHEMICALS, OILS AND OIL PRODUCTS STORED IN SECONDARY CONTAINMENT?					
3.6	ARE NON-COMPATIBLE CHEMICALS PROPERLY STORED? (CORROSIVES FROM FLAMMABLES, ACIDS FROM BASES, ETC.)					
3.7	ARE NFPA-704 LABELS POSTED OUTSIDE EACH ENTRANCE TO THE LAB?					
3.8	ARE FULL/PARTIAL CONTAINERS STORED WITH CAPS OR LIDS IN PLACE?					
3.9	ARE LAB WASTES PROPERLY MANAGED (TRASH, WASTE PRODUCTS & CHEMICALS, WASTE CEMENT, ETC.)?					
3.10	IS THERE A COMPLETE CHEMICAL INVENTORY ON FILE?					
3.11	IS PROPER PPE USED & AVAILABLE FOR USE?					
3.12	ARE ALL MSDS SHEETS AVAILABLE AT THE COMMUNITY RIGHT TO KNOW STATION & CURRENT?					

4.0	EQUIPMENT MAINTENANCE	Yes	No	Comments	CA/CPI No.	Date
4.1	ARE ALL WORK TOOLS IN GOOD WORKING CONDITION?					
5.0	ELECTRICAL	Yes	No	Comments	CA/CPI No.	Date

Lab Monthly Tier Inspection

5.1	ARE ELECTRIC POWER BOXES COVERED, CLOSED?								
5.2	ARE WALL SOCKETS IN GOOD CONDITION? (COVERED AND NOT BROKEN, GFI'S, ETC.)								
5.3	IS ALL ELECTRICAL EQUIPMENT PROPERLY GROUNDED?								
5.4	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL REPAIR?								
5.5	IS EMERGENCY EYE WASH & SHOWER STATION PROPERLY MAINTAINED, TAGGED & INSPECTED WEEKLY?								
5.6	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES, NO INSULATION BREAKS, PROPER GROUND PLUG)								
5.7	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?								
6.0	OTHER SITE SPECIFIC ISSUES								
6.1	ARE EMERGENCY TELEPHONE NUMBERS POSTED AT EACH TELEPHONE?								
6.2	ARE OPERATING PROCEDURES DOCUMENTED, COMMUNICATED, UNDERSTOOD AND FOLLOWED?								
6.3	ARE WASTE MINIMIZATION/POLLUTION PREVENTION DISCUSSED AT DEPARTMENTAL MEETINGS?								

Lab Monthly Tier Inspection

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**MONTHLY TIER INSPECTION
WELDING BAY**

FACILITY LOCATION: _____ INSPECTOR: _____

DATE: _____ TIME: _____

CIRCLE APPLICATION Tier I Tier II Tier III

1.0	HOUSEKEEPING	YES	NO	COMMENTS	CA/CPI NO.	DATE
1.1	ARE WORK AREAS NEAT AND CLEAN ?					
1.2	IS AREA CLEAN AND FREE OF CHEMICAL OR/AND OIL SPILLS?					
1.3	IS AREA FREE OF FLAMMABLE MATERIAL?					
1.4	IS WORK AREA FREE OF STUMBLING/TRIPPING HAZARDS?					
1.5	ARE EXIT SIGNS POSTED AT ALL EXITS?					
1.6	ARE TOOLS STORED OFF THE FLOOR AND IN RACKS?					
1.7	ARE "NO SMOKING" SIGNS POSTED AS REQUIRED?					
2.0	FIRE EXTINGUISHERS	Yes	No	Comments	CA/CPI No.	Date

**MONTHLY TIER INSPECTION
WELDING BAY**

2.1	PROPERLY MOUNTED (OFF THE FLOOR AND NO MORE THAN 42" FROM TOP TO THE FLOOR)?					
2.3	UNOBSTRUCTED ACCESS?					
2.4	INSPECTED WITHIN LAST 12 MONTHS AND TAGGED?					
2.5	SIGN INDICATING LOCATION OF EXTINGUISHER?					
3.0	PRODUCT/WASTE MANAGEMENT					
3.1	IS WELDING STALL NEAT AND CLEAN?	Yes	No	Comments	CA/CPI No.	Date
3.2	IS SCRAP IRON REMOVED TO SCRAP IRON BEN PROMPTLY?					
3.3	ARE ACETYLENE AND OXYGEN BOTTLES STORED PROPERLY?					
3.4	DO ALL PRODUCT STORAGE CONTAINERS HAVE PRODUCT LABELS AND DATED?					
3.5	ARE FLASHBACK ARRESTORS IN PLACE?					

**MONTHLY TIER INSPECTION
WELDING BAY**

3.6	ARE FLAMMABLES REMOVED IMMEDIATELY AFTER USE?						
4.0	EQUIPMENT MAINTENANCE						
4.1	ARE CHEMICAL CONTAINERS USED FOR TRASH LABELED "TRASH" ?	Yes	No	Comments	CA/CPI No.	Date	
4.2	ARE FACE SHIELDS IN GOOD CONDITION AND AVAILABLE?						
4.3	ARE GUARDS IN PLACE ON ALL MOVING PARTS (COMPRESSOR, MOTORS, & PUMPS)?						
4.4	ARE AIR HOSES IN GOOD CONDITION?						
4.5	ARE WELDING LEADS/HOSE IN GOOD CONDITION?						
4.6	HAVE OXYGEN BOTTLES VALVES BEEN INSPECTED?						
4.7	ARE ALL HAND TOOLS IN GOOD SOUND WORKING CONDITION?						
4.8	ARE GRINDERS PROPERLY MAINTAINED PER C4S4?						

**MONTHLY TIER INSPECTION
WELDING BAY**

4.9	IS PPE AVAILABLE AND USED?							
5.0	ELECTRICAL	Yes	No	Comments	CA/CPI No.	Date		
5.1	ARE ELECTRIC POWER BOXES COVERED?							
5.2	ARE WALL SOCKETS IN GOOD CONDITION?							
5.3	ARE ALL BREAKER BOXES MARKED TO WHAT THEY CONTROL?			(COVERED AND NOT BROKEN)				
5.4	IS ALL ELECTRIC EQUIPMENT PROPERLY GROUNDED?							
5.5	IS AREA IN FRONT OF BREAKER BOXES CLEAR FOR THREE FEET AND MARKED?							
5.6	IS A CERTIFIED ELECTRICIAN USED FOR ALL ELECTRICAL WORK?							
5.7	ARE ALL EXTENSION CORDS IN GOOD CONDITION? (NO SPLICES)							
5.8	ARE OVERHEAD LIGHT BULBS COVERED AS REQUIRED?							
6.0	OUTSIDE AREAS	Yes	No	Comments	CA/CPI No.	Date		

**MONTHLY TIER INSPECTION
WELDING BAY**

6.1	DOES AREA LOOK NEAT AND CLEAN?				
6.2	ARE REGULATED WASTES IN TRASH DUMPSTER?				
6.3	IS IRON JUNK DISPOSED OF IN A TIMELY MANNER?				
6.4	ARE EMPTY CONTAINERS MOVED TO PROPER STORAGE AREA?				

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DAILY HSE INSPECTION

Facility Location: Bulk Materials Handling and Loading Area

Inspection by: _____

Objective: Ensure the Health & Safety of employees and public while protecting the Environment.

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the bulk materials handling and loading area. Conduct weekly inspections of the warehouse and loading area, chemical storage area, empty drum storage area, LGC, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹			
Fire extinguishers properly maintained. ¹			
Spill kits properly maintained. ¹			
Personnel Protective Equipment (PPE) guidelines followed. ¹			
Proper waste management guidelines followed. ¹			
Equipment and hand tools properly maintained. ¹			
All containerized waste properly labeled. ²			
Employee right to know station accessible and up-to-date.			
Area clean and free of chemical spills.			
Evidence of acid fume release. (unusual odor / corrosion) ⁴			
Storm/waste water present in any secondary containment.			
Evidence of waste chemicals in secondary containment.			
Acid returns neutralized on trucks.			
Acid returns pH and volume documented prior to discharge.			
Vendor off loading procedure in place and followed.			
Full or partial containers stored with bungs and lids in place.			
All partials easily identified.			
All empty containers have product labels.			
Empty drums stored horizontal with bungs in place. ³			
All liquid chemicals secondarily contained.			See Item 5
Hazardous waste storage area inspected weekly. ²			
Hazardous waste storage area inventory up-to-date. ²			
Hazardous waste storage area properly designated. ²			

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DAILY HSE INSPECTION

All product storage containers have product labels.			
Empty chemical containers stored in designated area.			
Empty storage area properly designated. ²			

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

³ Drums will be and banded prior to shipping.

⁴ Normal vent odors will not be considered.

⁵ CPI generated 17 July 01 concerning condition of tote area containment.

DAILY HSE INSPECTION

Facility Location: **Hazardous Waste Storage Area**

Inspection by: _____

Objective: Ensure the Health & Safety of employees and public while protecting the Environment.

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the bulk materials handling and loading area. Conduct weekly inspections of the warehouse and loading area, chemical storage area, empty drum storage area, LGC, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹			
Personnel Protective Equipment (PPE) guidelines followed. ¹			
Proper waste management guidelines followed. ¹			
All containerized waste properly labeled. ²			
Employee right to know station accessible and up-to-date.			
Area clean and free of chemical spills.			
Evidence of acid fume release. (unusual odor / corrosion) ⁴			
Evidence of waste chemicals in secondary containment.			
Full or partial containers stored with bungs and lids in place.			
All liquid chemicals secondarily contained.			
Hazardous waste storage area inspected weekly. ²			
Hazardous waste storage area inventory up-to-date. ²			
Hazardous waste storage area properly designated. ²			
All product storage containers have product labels.			

¹ Refer to inspection guidelines.² Refer to Environmental Compliance Waste Storage and Transportation manual.³ Drums will be banded prior to shipping.

DAILY TIERED INSPECTION FORM

AREA: HAZ. WASTE AREA

DATE: _____

#####

		YES	NO
#1	IS AREA NEAT AND CLEAN?		
#2	IS WASTE INVENTORY LOG USED AND UP-TO-DATE?		
#3	ARE ALL TOTES , DRUMS AND PAILS PROPERLY LABELED?		
#4	IS THERE ANY CHEMICAL SPILLS?		
#5	IS THERE A SPILL KIT IN PLACE?		
#6	IS FIRE EXTINGUISHER WORKING AND INSPECTED?		
#7	IS SECONDARY CONTAINMENT IN WORKING COND.?		
#8	ARE LIDS AND BUNGS IN PLACE?		
#9	IS THE SPILL KIT PROPERLY STOCKED?		
#10	IS ALL TRASH AND DEBRIS CLEANED FROM AREA?		

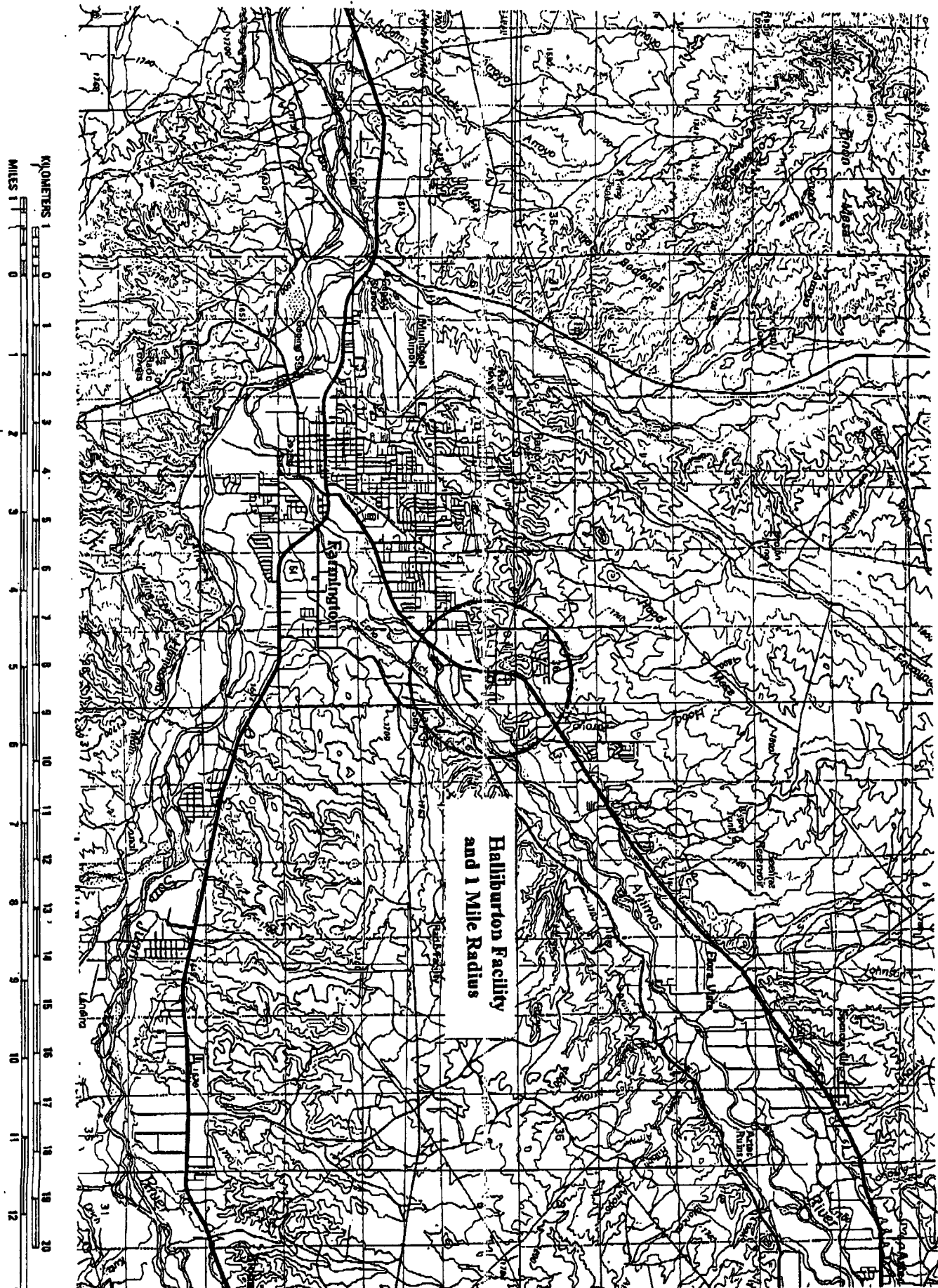
COMMENTS:

INSPECTED BY: _____

ATTACHMENT VII

**MAP SHOWING ONE
MILE RADIUS AND
WATER BODIES**

Halliburton Facility
and 1 Mile Radius



ATTACHMENT VIII

SUBSURFACE INVESTIGATION

san juan testing laboratory, inc.

PHONE:

327-9944

909 W. APACHE • P.O. BOX 2079 • FARMINGTON, NEW MEXICO 87401

March 11, 1975

Halliburton Services Co.
P. O. Drawer 960
Farmington, New Mexico

Attn. Raymond Gunn
District Superintendent

Re: Bulk Plant Addition
Halliburton Services Co.
Farmington, New Mexico

Dear Mr. Gunn:

Pursuant to your request, we have completed the subsurface investigation for the referenced plant expansion. The attached report includes test boring logs, soil resistivity summary, conclusions and recommendations regarding recommended foundation systems for the proposed bulk plant. If additional information is required, do not hesitate to contact us.

Pursuant to your instructions, we have forwarded two copies of this report to Mr. Jack Kramer with the Bulk Construction Department in Duncan, Oklahoma.

Very truly yours,

SAN JUAN TESTING LABORATORY, INC.


Lawrence A. Brewer, P.E.
President



LAB:bep

Attachments

CC: Jack Kramer

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

GENERAL CRITERIA

Three test borings were attempted beneath the proposed structures to depths of 7' to 9'. The test borings were located beneath the proposed addition as indicated on Project Drawing No. FC 268A dated January 1975. Said test holes were extended by rotary drilling utilizing an Acker Terado truck mounted drill rig to the depths indicated on the logs. Rotary drilling of gravel, cobbles and boulders is extremely difficult and expensive. For this reason, advancement of test borings was terminated at the depths shown. Backhoe test pits were considered but were rejected due to the potential damage to the existing parking lot paving. An alternate solution to advancing the test borings thru the use of a cable tool was the earth resistivity method.

Earth resistivity readings were taken at two locations in the project area as shown on Plate "A" at depth intervals of 3'. Resistivity readings were established thru the utilization of a Strata Scout resistivity meter, Model R-40, manufactured by Soil Test, Inc.. The electrode spacing and readout calculations are based on the Wenner method. The results of the resistivity readings are summarized on Sheets 6 and 7. The resistivity readings correlate with projected depths of the various subgrade strata as evidenced by the other subsurface investigations and by outcrops in the vicinity. A geologic cross section, Plate "B", indicates the projected subgrade strata beneath the site.

The location of the test holes and their relationship to the proposed plant expansion are shown on Plate "A". The boring logs, complete with laboratory analysis, AASHO classifications, in place moisture, penetration resistance, etc., are shown on Sheets 3, 4 and 5.

Substrata conditions at the site consist of sedimentary and alluvial deposits of clayey silt, sand, gravel and cobbles, with the entire site underlain by sandstone as evidenced by the resistivity survey and test borings completed for others and shown graphically on the geologic section, Plate "B".

Conclusions and recommendations regarding maximum bearing values, recommended footing systems and other data pertinent to the development of the project at the site are summarized on pages 8, 9 and 10.

CLIENT HALLIBURTON SERVICESDATE MARCH 11, 1975PROJECT ADMIN BUILDINGLOCATION FARMINGTON NEW MEXICOHOLE NO. A LOG NO. 18177COLLAR ELEV. 100.93

PROBE SETTING		DIRECTION					DIRECTION			
RED	BLACK	DEPTH	OHMS	MHOS	LAYER MHOS	RESISTIVITY	OHMS	MHOS	LAYER MHOS	RESISTIVITY
1.5	4.5	0-3	35.3	.030	.030	19,000				
3.0	9.0	3-6	19.8	.061	.021	27,000				
4.5	13.5	6-9	11.7	.085	.034	17,000				
6.0	18.0	9-12	9.87	.107	.022	26,000				
7.5	22.5	12-15	7.84	.128	.021	27,000				
9.0	27.0	15-18	7.32	.137	.009	64,000				
10.5	31.5	18-21	6.69	.149	.012	48,000				
12.0	36.0	21-24	6.01	.166	.017	33,000				
13.5	40.5	24-27	5.01	.200	.034	17,000	A			
15.0	45.0	27-30	4.59	.218	.018	32,000				
16.5	49.5	30-33	4.32	.221	.003	192,000	B			
18.0	54.0	33-36								
19.5	58.5	36-39								
21.0	63.0	39-42								
22.5	67.5	42-45								
24.0	72.0	45-48								
25.5	76.5	48-51								
27.0	81.0	51-54								
28.5	85.5	54-57								
30.0	90.0	57-60								
31.5	94.5	60-63								
33.0	99.0	63-66								
34.5	103.5	66-69								
36.0	108.0	69-72								
37.5	112.5	72-75								

REMARKS

A - H₂O

B - SANDSTONE

TEST No. 16127PAGE 6

CLIENT HALLIBURTON SERVICESDATE MARCH 11, 1975PROJECT ADMIN BUILDINGLOCATION FARMINGTON NEW MEXICOHOLE NO. B LOG NO. 18178COLLAR ELEV. 100.88

PROBE SETTING		DIRECTION					DIRECTION			
REC	ALOK	DEPTH	OHMS	MHOS	LAYER MHOS	RESISTIVITY	OHMS	MHOS	LAYER MHOS	RESISTIVITY
1.5	4.5	0-3	102.0	.010	.010	51,000				
3.0	9.0	3-6	53.8	.018	.008	72,000				
4.5	13.5	6-9	31.4	.027	.009	64,000				
6.0	18.0	9-12	25.1	.039	.012	48,000				
7.5	22.5	12-15	19.1	.052	.013	44,000				
9.0	27.0	15-18	15.9	.063	.011	52,000				
10.5	31.5	18-21	12.0	.083	.020	29,000				
12.0	36.0	21-24	9.9	.101	.018	32,000				
13.5	40.5	24-27	8.6	.116	.013	38,000				
15.0	45.0	27-30	7.67	.130	.014	41,000	A			
16.5	49.5	30-33	6.75	.148	.018	32,000				
18.0	54.0	33-36	5.69	.176	.028	20,500	B			
19.5	58.5	36-39	5.69	.178	.002	288,000				
21.0	63.0	39-42	5.92	.180	.002	288,000				
22.5	67.5	42-45								
24.0	72.0	45-48								
25.5	76.5	48-51								
27.0	81.0	51-54								
28.5	85.5	54-57								
30.0	90.0	57-60								
31.5	94.5	60-63								
33.0	99.0	63-66								
34.5	103.5	66-69								
36.0	108.0	69-72								
37.5	112.5	72-75								

REMARKS

A - H₂O

B - SANDSTONE

TEST No. 16127PAGE 7

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

CONCLUSIONS & RECOMMENDATIONS

The subgrade strata encountered at the site as evidenced by this investigation is clayey silt, sand, gravel and cobbles, underlain by an extensive strata of sedimentary sandstone. No potentially expansive soil was encountered at the site. Free water could be encountered at a depth of 24'.

The correlation between new test borings, test borings and pits completed by others and the resistivity survey results is summarized graphically on the north-west south-east cross sections shown on Plate "A". The extent of the cobblestone layer, the water table and the surface of the sedimentary sandstone is approximate beneath the site since the resistivity survey is only accurate to approximately half the interval measured or approximately 2'.

We recommend that the footing system for the proposed plant expansion be founded at least 4' into the cobblestone strata.

The footing system may be composed of reinforced concrete footings and stem walls or spot footings with grade beams with footings founded as outlined above. The maximum soil pressure imposed by the footing system should not exceed 6,500 pounds per square foot for combined live and dead loads.

Footings adjacent to the existing facility should be founded at depths similar to those existing footings regardless of depth and should be sized on the basis of existing soil bearing pressures imposed by the existing structures. Settlement of the coarse granular non-cohesive soils is estimated to be less than 5/8" which total settlement should occur during construction.

The footing subgrade should be "over-excavated" to a minimum depth of 2" to eliminate the possibility of point bearing on any single boulder or cobble. Loose

gravel or cobbles should be removed from the excavation and the bottom of the footing excavation then brought back to "grade" with a non-plastic select backfill composed of crushed rock with the following gradation.

<u>Sieve Designation</u>	<u>Percent Passing by Weight</u>
1"	100%
No. 4	20%-45%
No. 200	0%-10%

The select backfill should be compacted to a density of 95% of the maximum density as determined by ASTM D-1557, Method "D", at optimum moisture content.

Interior load bearing walls or columns should be founded over spot footings with grade beams or continuous footings at depths similar to exterior footings in that area of the structure.

Interior slabs on grade should be isolated from all structural components of the footing system and should be founded over a 4" compacted subgrade composed of the select backfill as outlined above. A polyethylene vapor barrier should also be placed between the prepared subgrade and interior slabs. Interior non-load bearing partitions may be founded over thickened slabs, however, care should be exercised where such partitions join structural components through the placement of expansion joints or similar treatment to allow minor movement.

Compaction of slab subgrade and perimeter footing or grade beam backfill should be at least 95% of the maximum density as determined by ASTM D-1557, Method "A". Pressured plumbing placed below slabs on grade should be avoided where possible or should be installed in a pipe chase or water tight sleeve to insure the timely detection of leaks and reduce the possibility of saturating and subgrade strata. Gravity plumbing should be pressure tested where tested where placed below grade for similar reasons.

Exterior site grading should insure rapid run-off of surface waters. Down spouts, parking lot drainage, outside wash rack areas and other concentrations of

surface run-off should be avoided on the north sides of structures and should be extended away from all structures in suitably sized culverts or paved drainage ditches.

Street and parking lot construction should include recompaction of loosely consolidated fills prior to paving if "proof rolling" with a 50 ton roller indicates a lack of stability. The embankment areas should be compacted to 90% of the maximum density as determined by ASTM 698, Method "A" to within 12" of finished subgrade. Compaction for the remaining 12" of the embankment should meet 90% of ASTM D-1557, Method "A". The upper 6" of cut sections should also be compacted to a density of 90% of ASTM D-1557, Method "A". A minimum of 6" of dense graded aggregate base course should be placed over the compacted subgrade. The base course should be compacted to a density of 95% of ASTM D-1557, Method "B". A bituminous prime coat (MC70) may then be placed over the compacted base course at a rate not to exceed 0.15 gallons per square yard. Plant mixed asphaltic concrete paving should be placed to a depth of 3" over the prepared base.

The chemical analysis of the soils at the site indicate that Type II Air Entrained cement will provide adequate protection for all exposed concrete from the moderate sulfate content.

ATTACHMENT IX

RADIOACTIVE SURVEY

NUCLEAR PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/date/#: Farmington, N.M. / 8-21-96 / BTG
 Sample form: Soil, taken by: RSO, report to: RSO
 Data start date: 9/24/96, hour: 15:28, Count time: 50,000 s.
 Weight: 903 g. X 500 ml M.B. or point source @ SDD: cm.
 HPGe γ -ray det. # 2. Group # 1, Tag/file # FARM BTG

Isotope	MDC ^a (pci g ⁻¹)	Meas. ^b (pci g ⁻¹)	Remarks
⁴⁰ K	7.0E-2	1.9 \-1	
⁴⁶ Sc	6.4E-3		
^{110m} Ag	5.4E-3		
¹³¹ I	4.7E-3		
¹³⁷ Cs	6.1E-3	1.0 \-1	
¹⁹² Ir	4.8E-3		
²⁴¹ Am	1.5E-3		
²³²Th series			
²²⁸ Ac	1.9E-2	6.9 \-1	
²²⁸ Th	2.9E-1	1.0	
²²⁴ Ra	9.4E-2	2.7 \-1	
²¹² Pb	9.3E-3	8.6 \-1	
²¹² Bi	7.6E-2	8.3 \-1	
²⁰⁸ Tl	4.9E-3	2.3 \-1	
²³⁵U series			
²³⁴ Th	1.1E-1	4.8 \-1	
²³⁴ Pa	1.9E-2		
²²⁶ Ra	1.2E-1	1.3	
²¹⁴ Pb	1.1E-2	7.4 \-1	
²¹⁴ Bi	1.1E-2	7.4 \-1	
²¹⁰ Tl	4.5E-3		
²¹⁰ Pb	1.2E-1	4.6 \-1	
²³⁸U series			
²³⁵ U	8.6E-3		
²³¹ Pa	1.6E-1		
²²⁷ Th	4.5E-2		
²²³ Fr	1.5E-1		
²²³ Ra	2.9E-2		
²¹⁹ Rn	3.7E-2		
²¹¹ Pb	1.2E-1		
²¹¹ Bi	2.9E-2		

Comments: _____

^aMin. det. conc. above det. bkg. @ 95% c.l. for spec. parameters.
^bMeasured conc. above det. bkg.

R. J. Buchanan 10-14-96
 Ron J. Buchanan, Ph.D., CHP
 DTC (405) 251-4444

PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/date/#: Farmington, NM / 8-21-96 / road side
 Sample form: Soil, taken by: RSO, report to: RSO
 Data start date: 9/25/96, hour: 08:16, Count time: 50,000 s.
 Weight: 814 g. X 500 ml M.B. or point source @ SDD: cm.
 HPGe γ -ray det. # 2. Group # 1, Tag/file # FARMWR

Isotope	MDC ^a (pCi g ⁻¹)	Meas. ^b (pCi g ⁻¹)	Remarks
⁴⁰ K	7.0E-2	1.4\1	
⁴⁶ Sc	6.4E-3		
^{110m} Ag	5.4E-3		
¹³¹ I	4.7E-3		
¹³⁷ Cs	6.1E-3	3.1\1-2	
¹⁹² Ir	4.8E-3		
²⁴¹ Am	1.5E-3		
²³²Th series			
²²⁸ Ac	1.9E-2	8.2\1	
²²⁸ Th	2.9E-1	9.7\1	
²²⁴ Ra	9.4E-2	3.2\1	
²¹² Pb	9.3E-3	1.0	
²¹² Bi	7.6E-2	9.9\1	
²⁰⁸ Tl	4.9E-3	2.8\1	
²³⁸U series			
²³⁴ Th	1.1E-1	5.7\1	
²³⁴ Pa	1.9E-2		
²²⁶ Ra	1.2E-1	1.3	
²¹⁴ Pb	1.1E-2	7.8\1	
²¹⁴ Bi	1.1E-2	7.7\1	
²¹⁰ Tl	4.5E-3		
²¹⁰ Pb	1.2E-1	5.1\1	
²³⁵U series			
²³⁵ U	8.6E-3		
²³¹ Pa	1.6E-1		
²²⁷ Th	4.5E-2		
²²³ Fr	1.5E-1		
²²³ Ra	2.9E-2		
²¹⁵ Rn	3.7E-2		
²¹⁵ Pb	1.2E-1		
²¹⁵ Bi	2.9E-2		

Comments: _____

^aMin. det. conc. above det. bkg. @ 95% c.l. for spec. parameters.
^bMeasured conc. above det. bkg.

R.J. Buchanan 10-14-95
 Ron J. Buchanan, Ph.D., CHP
 DTC (405) 251-4444

P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

NEW MEXICO
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Revised 12/1

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: Oilfield Service Facility
2. Operator: Halliburton Energy Services
Address: P. O. Box 960, Farmington, NM 87499
Contact Person: Jim Haney Phone: _____
3. Location: NW /4 NE /4 Section 1 Township 29N Range 13W
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. CERTIFICATION

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

NAME: Mike Cornforth Title: Sr. Environmental Specialist
Signature: *Mike Cornforth* Date: 3/19/98

DISCHARGE PLAN APPLICATION

Part 1. Type of Operation

Oil Field Service Facility

Part 2. Name of Operator or Legally Responsible Party and Local Representative

**Halliburton Energy Services
P.O. Box 960
Farmington, New Mexico 87499**

Local Contact: Mr. Jim Haney (505) 324-3500

Part 3. Location of the Discharge Plan Facility

The Farmington Facility is located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico.

Part 4. Landowners

**Halliburton Energy Services, Inc.
5151 San Felipe
Houston, Texas 77056**

Part 5. Facility Description

The **Farmington Halliburton Energy Services** facility is located at 4109 E Main, Farmington, NM 87402. The primary services provided are hydraulic fracturing, cementing and acidizing oil and gas wells. Maintenance of trucks and oilfield service equipment, blending and loading of liquid and non-liquid chemicals and storage of these chemicals occurs at this facility. A description of these activities is provided below:

The facility layout is depicted in Attachment I.

Chemical Terminal (Labeled Chemical Terminal on Attachment I)

Hydrochloric acid is stored, in concentrated form, in a steel, rubber-lined enclosed tank. The tank is within a coated concrete secondary containment. Connections for loading of the acid are located within the secondary containment. Any spills occurring inside the containment are recovered, transferred to a storage tank and reused.

Additional chemical additives are stored in the acid additive drum storage area. Additives are stored in either DOT quality drums or portable containers. This area is curbed for secondary containment.

Acid is loaded onto Halliburton transports from an overhead line through a hatch on the top of the transport. The transport is located on a coated concrete loading bay during the loading process. The loading bay is equipped with a trough that leads directly to the chemical terminal secondary containment. Spills in the secondary containment area drain to a sump, is pumped into the acid return tank and reused.

A liquid gel concentrate is stored and loaded from this same area. The gel concentrate is a solution of gel in diesel. The gel concentrate is stored in an enclosed tank within secondary containment. Loading and mixing operations occur on the same loading bay as the acid. Sacks of gel are stored inside a warehouse prior to mixing. Also, certain drummed chemical additives for the gel concentrate system are stored in same warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed.

Cement Bulk Storage Area (Labeled as such on Attachment I)

Bulk cement and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement material warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed. Mixing and transferring of materials from the cement bulk plant to the truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk chemicals and additives.

Sand Bulk Plant Area (Attachment I)

All materials stored in this area are non-liquid, dry chemicals. Bulk sand and proppants are stored in fully enclosed storage vessels. Loading and unloading of the sand is done pneumatically.

Maintenance Shop (Labeled Truck Shop on Attachment I)

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation and curbing that is self contained. Any spills in the shop area cannot escape the shop area are immediately cleaned and properly disposed. Three solvent based parts washers are located in the Maintenance shop area. Truck servicing is performed in the main shop. All used oil is collected in a used oil tank. The used oil tank is located in the wash rack area within concrete secondary containment. Used oil filters are drained at least 12 hours and placed in a drum and shipped to our TSDF and waste management facility in Duncan, OK and are ultimately recycled.

Wash Rack Area (Labeled Wash on Attachment I)

Truck and equipment washing is performed in this area. The building is roofed and walled on three sides. The structure is designed to capture overspray, wash water and grit. Each wash bay drains to a sump for grit separation. The sumps drain to a three stage oil/water separator, then to the sewer.

Adjacent to the wash rack is a concrete pad for drying washrack grit. The grit is removed from the sumps on a regular basis, placed on the drying slab, allowed to dry and sent to a land treatment facility. The drying slab is contained on three sides with concrete walls and on the fourth side by a removable steel plate to allow access and removal of the grit. (South East Corner of Wash Bay, Attachment I)

Trucks and equipment are lubricated in the Grease Room in the Washrack area. Lubricants are stored in bulk storage tanks, drums and pails, all of which are within concrete secondary containment and are covered.

Drum Storage Area (Located directly between the Chemical Terminal and Tools on Attachment I)
The drum and portable container storage area is constructed with a paved floor and curbing for secondary containment. An inspection of this area is conducted daily, and documented weekly. Any spills or leaks in this area is cleaned and disposed of properly as they are discovered.

Truck and Equipment Parking Areas (Attachment I)

Oilfield service trucks and equipment are parked in the areas labeled on Attachment I.

Miscellaneous

In addition to the above, certain other waste management practices are followed. Trash containers are conveniently located throughout the facility and are regularly emptied by a waste management service. Paved surfaces are inspected and cleaned as required. Weeds and debris are removed as needed. Good housekeeping practices are adhered to at this facility.

Past Spills, Leaks and Stormwater Runoff

There have been no significant spills at this facility in the past three years.

The facility is constructed such that all stormwater runoff leaves the property at one point just south of the paint shop and denoted on Attachment I by the arrow pointing south. The facility receives significant stormwater runoff from adjacent properties and roads on the north and west.

Part 6. Materials Stored or Used at the Facility

A complete list of chemical products utilized in servicing oil wells is included in this application as Attachment II.

Name	General Makeup or Specific Brand	Solid or Liquid	Type of Container	Estimated Volume Stored	Location
1. Drilling Fluids	None				
2. Brines (KCl, NaCl, etc.)	Weak NaCl	Liquid	Tank	Neutralized HCl	Chemical Terminal
3. Acids/Caustics	Hydrochloric acid	Liquid	Tank	13,000 gal	Chemical Terminal
4. Detergents/Soaps	Howco Suds	Liquid	Drum	165 gal	Drum Area
	AQF II	Liquid	Drum	440 gal	Drum Area
	SSO 21MW	Liquid	Drum	660 gal	Drum Area
	Washrack Soap	Liquid	Drum	55 gal	Washrack Area
5. Solvents & Degreasers	Safety Kleen	Liquid	Drum	20 gal	Shop, Grease room
6. Paraffin Treatment/Emulsion Breakers	Lo Surf	Liquid	Drum	275 gal	Drum Storage Area
7. Biocides	BE-6	Solid	Can	400 lbs	Cement Sand Plant
	BE-3S	Solid	Can	40 lbs	
8. Other Materials	Poz Mix A	Solid	Tank	142,000 lbs	Cement & Sand Plant
	Cement	Solid	Tank	279,000 lbs	
	Gilsonite	Solid	Tank	80,000 lbs	"
	Sand	Solid	Tank	842,000 lbs	"
	Flyash	Solid	Tank	3,750 lbs	"
	Gelling Agents	Liquid	Sack/Can	1,000 lbs	Drum Storage
	Gel Breakers	Liquid	Sack/Can	1,000 lbs	
	Emulsifiers	Liquid	Drum/Pail	500 gal	"
	De-emulsifiers	Liquid	Drum/Pail	100 gal	"
	Inhibitors	Liquid	Drum/Pail	200 gal	"
	Crosslinkers	Liquid	Tote/Drum	1000 gal	"

Part 7. A. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

	Waste Type	Types of major effluent	Quantities (per month)	Major Additives
1.	Truck Wastes	Neutralized Acid Returns	2500 gal	NaCl
2.	Truck Washing	Wash Water Grit	65,000 gal 16 cu. yds	Soap
3.	Steam Cleaning	Not applicable		
4.	Solvent/Degreaser Use	Safety Kleen (Three Units)	60 gal	Oils and Greases
5.	Spent Acids	Hydrochloric Acid Returns (Unused)	2500 gal.	
6.	Waste Slop Oil	Not applicable		
7.	Used Lubricants and Oils	Lube Oil and Crankcase Oil	185 gal	None
8.	Oil Filters	From Trucks and Engines	54 filters	None
9.	Tank Solids and Sludges	Not applicable		
10.	Painting Wastes	Safety Kleen	20 gal	
11.	Sewage	Sanitary sewage commingled with Industrial waste water from truck washing operation	65,000 gal	Soap
12.	Laboratory Wastes	Water Samples Crude Oil Samples Cement Samples	5 gal 5 gal 20 lbs	
13.	Other waste liquids	Off-Spec, out of date chemicals	100 gal	
14.	Other waste solids	Off-Spec, out of date chemicals Used drums	2 drums 100 ct.	

7. B. Quality Characteristics

1. Truck Wastes

Unused acid is the only significant waste returning to the facility in trucks. The acid returns are neutralized to a pH greater than 2, with sodium bicarbonate or equivalent, while still in the transport. The material is then transferred to a holding tank within the secondary containment of the chemical terminal. This "salt" water is used for makeup water on subsequent acid blends.

2. Truck Washing

The external components of the trucks and equipment are washed with water and soap. The primary constituents of the washwater effluent is grit, hydraulic oils, water, etc. The washwater mixture passes through a three bay oil/water/grit separator. The separator is concrete with a chemical resistant liner. The oil is trapped, removed with a belt type oil skimmer and collected in a drum. The drummed oil is then transferred to the Used Oil tank which is within secondary containment. The used oil is removed periodically by a waste oil recycler and taken off-site.

The washrack grit is sampled annually, utilizing a random grab sampling and compositing technique to ensure representative results. The composite sample is subjected to the Toxic Characteristic Leaching Procedure and for Corrosivity, Reactivity and Ignitibility. The results of the most recent test is included as Attachment III. The grit is removed periodically, dried on a designated grit drying bed. The grit is treated in a off-site commercial land treatment unit owned and operated by Enviro-Tech of Farmington, NM. The water travels to the local POTW through the sewer system.

3. Steam Cleaning Not Applicable

4. Solvent and Degreasers

Three Safety-Kleen brand parts washers, at the facility, are serviced every month, generating sixty gal/month. The parts washers are used for cleaning truck and equipment parts prior to maintenance.

5. Spent Acids

Acid returns are brought back to the facility, neutralized and managed as described in 7.B.1

6. Waste Slop Oil Not Applicable

7. Used Lubricants and Oils

Lube oils, crankcase oils and other used oils generated at the facility are collected in a secondarily contained tank located in the washrack area. The oils are removed by a waste oil recycler and hauled off-site. Management of these oils is as per 40 CFR 270.

8. Oil Filters

Oil filters generated at the facility are "hot-drained" for at least 12 hours, containerized and shipped by Halliburton truck to the TSDF in Duncan, OK. Once in Duncan, the filters, along with others, are shipped to a used oil filter recycler, through Specialty Environmental Services.

9. Tank Solids and Sludges Not Applicable

10. Painting Wastes

Painting wastes generated at the facility are recycled by use of a Safety-Kleen paint gun cleaner. All waste paint related materials are managed/recycled by Safety-Kleen.

11. Sewage

Sewage from bathrooms and kitchens are commingled with washrack water to the local POTW.

12. Laboratory Wastes

A small lab used for testing stimulation and completion products is located in the bulk cement plant warehouse. Wastes generated are primarily water with trace amounts of stimulation and completion chemicals, as well as other lab reagents. The waste water enters the sewer to the local POTW.

Oil samples are collected and either added to the used oil tank or shipped by company truck to the Halliburton TSDF in Duncan, OK for further management.

Cement retain samples are stored for a period of time and disposed of in the local landfill via the dumpster.

13. Other Liquid Wastes

Out of date or off-spec liquid chemical products are stored in a designated waste storage area located inside the southeast corner of the cement bulk plant warehouse. This storage area meets the requirements of 40 CFR 264 for small quantity generators. If the wastes are hazardous as per 40 CFR 261, they are managed accordingly. If nonhazardous, they are labeled as such, and stored in the same area. All chemical wastes generated at this facility are returned to the Duncan TSDF on company trucks, accompanied with a hazardous waste manifest within 180 days of being deemed waste.

14. Other Solid Wastes

Out of date or off-spec solid chemicals, are labeled as either hazardous or nonhazardous, stored in the designated waste storage area and returned to the TSDF in Duncan, OK via company truck. Pallets are returned to the Duncan TSDF for reuse or recycle. Chemical sacks are emptied and placed into dumpsters on site and sent to local landfill as are cardboard and paper products.

Empty drums and pails are stored in a designated empty container storage area. The drums are stored on their sides with bungs in place and tight, positioned with bungs horizontal to the ground. All empty containers, 5 gals in volume or larger, are returned to the Duncan TSDF and then shipped off-site to a metal recycler, drum recycler or plastic recycler as appropriate. The drums are "RCRA empty" prior to storage.

Part 8. A. Summary of Existing Liquid and Solid Waste Collection and Disposal

	Waste Type	Tank(T)/ Drums(D)	Floor Drain(F) Sumps (S)	Offsite Disposal
1.	Truck Wastes	Neutralized Returned Acid	Sump to Tank	Reused in subsequent ac blends
2.	Truck Washing	Only Truck and Equipment Washing	(S)	Wastewater to POTW Grit to Landfill by Truc
3.	Steam Cleaning	Not applicable		
4.	Solvent/Degreaser Use	(D) Safety Kleen		Safety Kleen/truck
5.	Spent Acids	(T) Collected in tank at chemical terminal		Reused in acid blends
6.	Waste Slop Oil	Not applicable		
7.	Waste Lubrication and Motor Oils	(T)		Waste Oil Recovery Co. by Truck
8.	Oil Filters	(D)		Halliburton TSDF in Duncan OK by Co. Truc
9.	Tank Solids and Sludges	Not applicable		
10.	Painting Wastes	(D)		Safety Kleen by Truck
11.	Sewage			POTW Sanitary Sewer
12.	Laboratory Wastes			POTW Sanitary Sewer
13.	Other Waste Liquids	Off-Spec, out of date chemicals		Halliburton TSDF in Duncan OK by Co. truc
14.	Other Waste Solids -	(S) Off-Spec, out of date chemicals (S) Empty drums		Halliburton TSDF in Duncan OK by Co. truc

8. B. Collection and Storage Systems

1. Sumps, Lines, Pits

Truck and equipment washing occurs in a washrack with a concrete grit sump. The primary separation of the grit occurs in this sump. The water, oils, greases and suspended solids travel through an unpressurized concrete trough and piping system to an oil water separator prior to entering the local POTW system. The oil water separator is concrete with a chemical resistant coating installed to ensure integrity. The oil water separator is inspected annually for integrity. This inspection is documented utilizing the "Tiered Inspection" program. An example of the tiered inspection documentation is Attachment IV.

Sewer lines are not pressurized and no lift station exists internal to the facility.

2. Tankage and Chemical Storage Areas

Acid returns are neutralized on the transport and then released into a concrete, lined sump, pumped to a storage tank, stored for a short while, and reused in subsequent acid blends. The storage tank is within the secondary containment of the chemical terminal. This secondary containment is concrete with a chemical resistant coating. The dimensions of the containment, less the volume taken by two other tanks within the containment, yield a volume greater than 35,000 gallons. The largest tank within the containment is 13,000 gallons. This is in excess of the requirement for the containment to be 1.33 times the capacity of the largest tank within the containment. This containment area is visually inspected each workday for leaks, spills or other releases. The releases are collected and pumped to the acid return tank for reuse.

Used oils are collected in a steel tank that is within steel secondary containment. The volume of the containment is greater than 1.33 times the capacity of the tank.

Containerized chemical products, that become waste, are stored in a designated waste storage area within a covered building. The area is on concrete, secondarily contained and inspected at least weekly. The waste chemicals are stored for no more than 180 days before being shipped off-site to the Duncan, OK TSDF.

Solid chemicals that become waste are stored in the same designated waste storage area as the liquids. Compatibility concerns are recognized and precautions taken. The wastes are stored no longer than 180 days and are shipped off-site to the Duncan, OK TSDF.

Liquid chemical products are stored in a designated storage area that is paved, curbed and inspected at least weekly for spills, leaks, deteriorating containers, missing labels, etc.

All chemicals are received, stored and shipped in DOT approved containers.

8. C. Existing Effluent and Solids Disposal

1. On-Site Disposal

No on-site disposal of waste materials occurs at this facility. There are no surface impoundments, leach fields or injection wells on this facility.

Drying Beds, or Other Pits

The grit from the washrack is removed periodically and placed into a designated drying area. The area is concrete floored and has three sides of concrete with one side made of a removable steel plate to provide access for removal of the grit once dried.

2. Off-Site Disposal

Off-site disposal of each waste stream is noted in the Table 8.A

9. Proposed Modifications

A new drum storage area is planned for completion during the summer of 1998. The area will be coated concrete with curbs constructed such as to accommodate a roof at a later date.

10. Inspection, Maintenance and Reporting

A. Halliburton adheres to a tiered inspection program that causes areas of concern to be inspected on a daily, weekly, monthly or quarterly basis. Corrective actions are generated as a result of the inspections. An example of the tiered inspections is included as Attachment IV.

Below grade sumps with liners or secondary containment are inspected at least annually. These inspections occur by detecting liquids in the interstitial space or by emptying, cleaning and visual inspections of the integrity of the sump. If leaks from these units are discovered or the integrity of the unit is suspect, the New Mexico OCD Rule 116 is followed. A release in excess of 25 barrels will be reported both verbally and written in a timely manner. Releases in excess of 5 barrels but less than 25 barrels will be timely reported in a written report.

B. No groundwater monitoring occurs at this facility.

C. Precipitation that is collected within the secondary containment of the chemical terminal, the drum storage area and the liquid gel concentrate area is pumped into the acid return tank and utilized as makeup water for acid blends. Stormwater or precipitation that is not captured leaves the property at one point on the south side of the facility. This facility has a current stormwater pollution prevention plan as per 40 CFR 120. This plan is Attachment V.

11. Spill/Leak Prevention and Reporting Procedures

The spill/leak contingency plan is included as Attachment VI. Chemical storage, blending, loading and unloading occurs in contained areas. The containment areas are inspected with spills and leaks cleaned up. All bulk liquid storage tanks are located within secondary containment one and one third the volume of the capacity of the largest tank. Releases to containment are recovered and for reuse. The largest spill potential outside containment would come from a 330 gal portable container.

All effluent from the facility leaves the property at one point. A significant spill could be contained on the property by blocking this exit, allowing time to remediate the spill. Spill kits are strategically located around the facility. The spill kits contain absorbent material, absorbent pads, shovels, and certain PPE and other spill cleanup materials.

Certain liquid and solid chemical products used, stored, blended or loaded at the facility contain constituents listed in WQCC 3103, "Standards for Groundwater" and 1101 TT, definition of "Toxic Pollutants". Each of these chemicals are listed below with the concentration of the constituent, as well as, the storage and handling techniques that greatly reduce potential for a spill, leak or discharge.

<u>Listed Constituent</u>	<u>Product</u>	<u>% in Product</u>	<u>Storage</u>
Fluoride	Ammonium Fluoride	33	Drum Storage area
Radioactivity	Densometers	Survey attached*	In Warehouse
Toluene	Paint Products	varied	Gal cans/warehouse
Ethylbenzene	Losurf-259	1-5	Drum Storage area
Xylenes	Xylenes	95	Drum Storage area
	Losurf-259	4	Drum Storage area
	Losurf-300	2	Drum Storage area
Methylene Chloride	Brake Cleaner Aerosol	Unknown	16oz aerosol cans
Naphthalenes	WS-44	2	Drum Storage
	Losurf-300	less than 10	Drum Storage
	Hyflo IV	2	5 gal pail
Chlorides	Potassium Chloride	100	Sacks / warehouse
	HC-2	8.5	Drum Storage
	Hydrochloric acid	35	Secondary Contain.
	XL-1	40	5 gal pails
	Max Seal	0.15	Drum Storage
	Calcium Chloride	100	Sacks / warehouse
Copper	Cat-3	1.9	Drum Storage
Iron	XL-1	40	5 gal pails
Phenols	Super Sand	less than 0.1	Sand Coating / dry
	Tempered Sand	less than 0.1	Sand Coating / dry

* See Attachment IX

12. Site Characteristics

1. Attachment VII. is a 1:100,00 map showing a radius of one mile around the facility. The bodies of water within that radius and the approximate distance from the facility is listed below:

<u>Water Body</u>	<u>Distance</u>	<u>Direction</u>
Animas River	0.6 miles	Southeast
Hood Arroyo	0.85 miles	East
Echo Ditch	0.85 miles	South

2. A subsurface investigation was conducted in 1975. The report is included as Attachment VIII.

3. The investigation shows the soil types, conductivity and other subsurface information for this site.

4. This facility receives much stormwater runoff from the north. Adequate stormwater runoff diversion are lacking but planned for the future.

13. Other Compliance Information

1. NMOCD Rule 116 and WQCC Section 1203 has been incorporated into the facility contingency plan.

2. A closure plan for this facility is not required.

List of Attachments

- I. Facility Plot Plan**
- II. Stock Status Report of Chemical Products on site**
- III. Latest TCLP analysis of our washrack grit**
- IV. Monthly Facility Assessments (Tiered Inspections)**
- V. Stormwater Pollution Prevention Plan (Forthcoming)**
- VI. Spill Contingency Plan (Forthcoming)**
- VII. 1:100,000 scale map with a one mile radius**
- VIII. Subsurface Investigation**
- IX. Latest Radioactive survey**

ATTACHMENT I

FACILITY PLOT PLAN SHOWING LOCATIONS OF BUILDINGS AND PROCESS AREAS AND DIRECTION OF STORMWATER FLOW

ATTACHMENT II

STOCK STATUS REPORT FOR CHEMICALS ON SITE

PROGRAM FW180
5-55930 ** FARMINGTON, NM

HALLIBURTON ENERGY SERVICES
FIELD STOCK STATUS USAGE DATE
REPORT

05/09/98
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DESCRIPTION	USGE REPL MMY U/I	*** YEAR-TO-DATE *** RECPTS ISSUES TRNFRS	FSB QTY	PKG QTY	O/O QTY	SURP QTY	MSO QTY UNIT	COST	OH-VALUE	OH-QTY	PART NO-123
BALL-PERFPAC-7/	* 0398 EA	1300	1000	25				.24	315.90	1300	70.00478
BALL-PERFPAC-7/	* 0398 EA	1300	1000	25				.31	403.00	1300	70.00475
BALL-PERFPAC-7/	0198 EA	75		25	125	75		.34	25.58	75	70.00493
K-34 (50# BAGS) 49	* 0398 LB	2000	3050	500	50			.22	180.00	800	70.15186
K-35	49 * 1295 LB			100		150		.15	23.08	150	70.15187
SODIUM PERSULFA 99	0398 EA	1027		085				.00	2408.57-	1610-	70.15188
K-33-K-TROL CON 99	1197 LB			085	50	50		.50	25.10	50	70.15184
G8W-3	49 * 0398 LB	50	50	200	50			3.10	682.03	220	70.15209
ECONOLITE-ADDIT 49	* 0398 LB	18000	14827	1000	100		2046	.39	2571.48	4538	70.15250
SODIUM PERSULFA 49	* 0398 LB	2915		825	55			1.21	5680.33	4685	70.15257
TLC-80-50# BAG 49	* 1094 LB				50	400		.58	235.59	400	70.15263
HYG-3	49 * 1295 LB			200	50	300		.69	347.28	500	70.15266
KCL POTASSIUM C 89	* 0298 LB	6100	4400	500	100			.12	372.00	3050	70.15302
CHEMICAL - HC-2 49	* 0398 GAL	1485	1346	880	55			5.38	8408.29	1562	70.15308
NF-1-5 GAL CAN 49	1297 GAL				5	50		25.57	1278.85	50	70.15311
WG-11	49 * 0198 LB	50		1000	50			1.15	1099.02	950	70.15331
FORMIC ACID-BUL 89	* 0398 GAL	440	538	30	110	55	18	5.86	539.23	92	70.15366
FR-5-FRICTION R 49	0696 GAL				54		5	11.18	55.90	5	70.15371
FE-1A-BULK 49	* 0398 GAL	1320	1443	660	330	41		4.57	3461.33	757	70.15412
QSR-100 - 50# S 49	* 1297 LB				50	1		1.49	.00		70.15485
DDC-3-5 GAL CON 49	* 1294 GAL			8	5			15.46	.00		70.15494
ISOPROPYL ALCHO 89	0298 GAL	220	290					3.50	35.00	10	70.15511
METHANOL-METHYL 49	0298 GAL						20	1.42	28.40	20	70.15512
DIACEL LWL-LW W 49	* 1297 LB				50		300	4.32	1296.60	300	70.15526
HYDROCHLORIC AC 89	0398 GAL	55518	61855			89871		.96	6066.69	6290	70.15530
FE-2 CITRIC ACI 49	* 0198 LB		103	1000	50		3397	.84	3731.03	4397	70.15538
HALAD 9-50# SAC 49	* 0398 LB	50	225	300	50	20		3.48	974.48	280	70.15556
AMMONIUM BI-FLU 49	* 0198 LB	200		1400	50			.85	1197.20	1400	70.15574

PROGRAM FW190
5-55930 ** FARMINGTON, NM

HALLIBURTON ENERGY SERVICES
FIELD STOCK STATUS USAGE DATE
REPORT

02/09/98
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DESCRIPTION	USGE REPL MYY U/I	**** YEAR-TO-DATE **** RECPTS ISSUES TRANS	FSB QTY	PKG QTY	O/D QTY	SURP QTY	MSO QTY	UNIT COST	OH-VALUE	OH-QTY	PART NUMBER
HOWCO SUBS	49 * 0198 GAL		55	55		835	55	7.60	7183.39	890	70.15462
MF-1-HALLIBURTO	49 * 0298 LB	200 362	1600	200	62			.56	984.08	1750	70.15466
INJECTROL A	89 0298 GAL	7690 8000	550	54	8310			1.98	4118.40	2080	70.15467
HOWCO SUBS-5 GA	49 * 0398 GAL	90 32	70	5	2	120		7.31	1536.58	210	70.15469
TB-41 FRACTURIN	0995 LB			10		41		.96	39.52	41	70.15427
SCA-130 - 55 GA	49 * 1297 GAL			55		30		6.27	188.31	30	70.15457
MUSOL A	49 * 1297 GAL			55		40		7.10	284.00	40	70.15756
D-AIR 1	49 * 1297 LB			50	27	65		.97	63.05	65	70.15764
SAND-OTTAWA-20/	89 * 0198 SCK	30		30	5	10		4.60	46.00	10	70.43151
LOSURF-259	49 * 0298 GAL		55	55	49			9.01	.00		516.00009
FE-2A-CITRIC AC	89 0398 GAL	442	330	330				5.54	1186.90	214	516.00029
HYFLO IV-5 GAL	99 0398 GAL	9	085	5				14.43	.00		516.00033
SGA-HT-51 GAL D	49 * 0298 GAL	102	102	51	36	448		19.61	10787.80	550	516.00039
WG 17 50# SACK	49 * 0398 LB	200	1000	200	240	475		3.61	5328.85	1475	516.00041
FERCHEK-50# BAG	49 * 0198 LB	300 200		55		100		4.70	1880.04	400	516.00043
AMMONIUM FLOURI	49 * 1297 GAL			55		34		2.95	100.35	34	516.00047
K-38-POLYBOR-50	49 * 0398 LB	1400 647	500	50		120		.83	1680.63	2020	516.00053
WS-44-EMULSIFYI	49 * 0398 GAL	110 70		55	220			7.53	828.66	110	516.00081
WG-18	49 0298 LB	1800		50		2200		1.60	3526.72	2200	516.00087
WG-19	49 * 0298 LB	1500 1225	3000	50				1.00	3111.75	3100	516.00107
CHEM-HALLIBURTO	49 * 1297 SCK		24	24		24		39.06	1875.24	48	516.00114
CHEM-HALLIBURTO	99 1297 GAL		085	55		55		26.06	1433.63	55	516.00116
BA-20	49 * 0298 GAL	59	220	55	2	55		4.38	1205.42	275	516.00119
HALAD-322	49 * 1297 LB		500	50	33			2.25	1015.11	450	516.00144
GBW-30 BREAKER	49 * 0398 LB	20 702	200	10	1	236		6.44	2810.67	436	516.00146
LOSURF-300 SURF	49 * 0398 GAL	583 542	159	53		451		6.68	6906.69	1034	516.00157
SALT-MORTON-PUR	89 * 0198 LB			2400		3040		.04	125.83	3040	516.00158
CFP-3	49 * 0198 LB	150 167	300	51	75						

PROGRAM FW180
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HALLIBURTON ENERGY SERVICES
FIELD STOCK STATUS USAGE DATE
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03/09/99
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DESCRIPTION	USGE REPL MMY U/I	**** YEAR-TO-DATE *** RECPTS ISSUES TRNFRS	FSB QTY	PKG QTY	O/O QTY	SURP QTY	MSO QTY UNIT	COST	OH-VALUE	OH-QTY	PART NUMBER
HII-124C	49 * 0997 LB					11		3.71	40.88	11	516.00192
SUPER CBL-100#	49 * 1297 LB		300	100	115			4.32	1296.39	300	516.00223
MICROBOND ADDIT	49 * 0198 LB		1000	50		1300		.23	549.82	2300	516.00236
HALAD-344-50# S	49 * 0398 LB	3500 3528	1000	50	60		217	6.60	6205.83	723	516.00227
SAND-12/20-BROW	89 0298 SCK	3226 2800	5000		19500			5.02	4625.39	920	516.00236
SAND-16/30-BROW	89 0797 SCK		10000					3.67	.00		516.00237
SAND-20/40-BROW	89 0298 SCK	14746 15044	5000		25552		450	3.62	12127.32	2895	516.00238
SAND-70/140 OR	89 0198 SCK		1000					2.90	699.14	241	516.00240
SAND-12/20-WHIT	89 0298 SCK	763 288						7.46	3548.00	475	516.00241
SAND-20/40-WHIT	89 0398 SCK	3013 1500	6000		16987			4.60	6967.77	1513	516.00242
BENTONITE-BULK	89 0398 SCK	581 644	800				26	4.68	2038.39	409	516.00259
CEMENT-STD-BULK	89 0298 SCK	14502 15205	10000		15498		1290	4.04	3809.85	348-	516.00263
CEMENT-CLASS G-	89 0398 SCK	8476 8146	5000		19524		277	4.13	5921.91	1156	516.00270
POZMIX A-BULK	89 0398 LB	639220 592633	150000		315340		35432	.00	1120.01	92381	516.00286
SILICA FLOUR-SS	89 1297 LB		60000					.04	332.38	7386	516.00289
MO-67	49 * 0298 GAL		110	55		165		1.80	497.26	275	516.00308
UG-22-1000# BAG	89 * 0398 LB	56000	16000	1000				.97	39031.30	40000	516.00317
SAND-16/30 MESH	49 1297 SCK						1867	5.29	.00	1867-	516.00324
GILSONITE-BULK	89 0398 LB	147120 156465	10000				13975	.07	2563.03	20810	516.00337
GS-5-50 GAL DRM	49 * 0298 GAL	200 83	150	50	13			8.33	1666.94	200	516.00353
CL-23 CROSSLINK	49 * 0298 GAL	55 31		55				9.30	511.80	55	516.00394
CL-24 CROSSLINK	49 * 1297 GAL			28		18		35.19	633.42	18	516.00395
OXOL II OXIDANT	89 * 0298 LB	880 1000		40	20			.59	238.88	400	516.00400
FE-3A-IRON SEQU	49 * 0897 LB		2000	50				.87	.00		516.00412
BA-40L BUFFER-5	49 * 1297 GAL		110	55		385		3.51	1740.52	495	516.00430
SILICALITE-BULK	99 1197 LB		40000		751200			.12	2225.73	18230	516.00443
AQF-2 FOAM AGEN	49 * 0298 GAL	1040 855	1040	52	48			5.58	7624.30	1365	516.00449
CLAYFX II-55 GA	49 * 0398 GAL	165 569	440	55	10			6.43	2765.86	430	516.00450

PROGRAM FW180
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HALLIBURTON ENERGY SERVICES
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03/19/78
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DESCRIPTION	USGE REPL	MMYY	U/I	*** YEAR-TO-DATE ***		FSB QTY	PKG QTY	O/D QTY	SURP QTY	MSD QTY	UNIT	COST	OH-VALUE	OH-QTY	PART NUMBER
				RECPTS	ISSUES										
GBW-30 BREAKER- 99	0298	LB		15		085	25					.00	104.64-	15-	516.00455
CLAYFIX II-HAL 49 *	0298	GAL					330	60	685			5.39	3696.16	685	516.00472
PEN-88 MICROEMU 99 *	0198	GAL		10		085	55		11			10.03	110.38	11	516.00473
SAND-ARIZONA SI 89	0398	SCK	40909	42682		15000		21172		7010		2.55	16657.20	478-	516.00477
SAND-ARIZONA SI 89	0398	SCK	1567	644		100		1660		100		1.73	1442.73	730	516.00478
FR-26LC-BULK 89	0398	GAL	2310	1928		1200		990				9.16	3297.93	360	516.00481
CLA-STA XP-CLAY 49 *	0398	GAL	55	25		110	55	4				13.30	1409.90	106	516.00490
BE-5 BIOCID-36 49 *	1297	LB				36	36					8.17	.00		516.00492
BA-50-BORIC ACI 89	0298	LB	500	850		10						.93	93.40-	100-	516.00493
HALAD 413- 50# 99 *	0198	LB		27		250			250			8.06	4031.26	500	516.00512
MICROBOND M-50# 89 *	1096	LB				500	50					.34	.00		516.00513
D-AIR 3- 5 GAL 49 *	1297	GAL					5		5			34.80	174.03	5	516.00517
HAI-85M CORROSI 49 *	0298	GAL					54		300			19.54	5862.01	300	516.00524
SCR-100 SYNTHET 99 *	0198	LB							725			5.56	4036.48	725	516.00535
SAND-SUPER LC-R 99	0997	LB						200000				.12	.00		516.00551
SUPERSET-W/ACTI 99	0298	GAL		17					645			9.22	5947.55	645	516.00553
HR-25-50# BAGS 49	1297	LB							100			7.41	741.02	100	516.00558
LGC-8 USING WG- 89	0398	GAL		9021		5000						4.66	14239.05	3051	516.00567
HSA II INHIBITO 49 *	0298	GAL				55	55					16.53	859.93	52	516.00571
MICRO MATRIX CM 99 *	1297	SCK				50		26				19.97	679.09	34	516.00611
GEL-STA L STABI 89	1297	GAL				55			215			7.58	1630.22	215	516.00627
MO-75 OIL GELLI 49 *	1297	GAL				55			55			16.58	912.34	55	516.00652
MO-76 OIL GEL A 49 *	1297	GAL				55			55			7.27	399.91	55	516.00653
OPTIFLO-E RETAR 49	0398	LB		37		50	50					15.00	270.00	18	516.00654
CL-29 CROSSLINK 49 *	1295	GAL				55			25			12.29	307.30	25	516.00710
CHEM-SGA-II ACI 49 *	0298	GAL	990	990		55			105			10.52	11525.23	1095	516.00731
SND-TEMPERED SU 99	0398	LB	620320	824160				200000		122600		.12	.00	122600-	516.00762
BE-6 BACTERICID 49 *	0398	LB	768	792		300	48	261				18.96	3793.07	200	516.00771

PROGRAM FW180
5-55930 ** FARMINGTON, NM

HALLIBURTON ENERGY SERVICES
FIELD STOCK STATUS USAGE DATE
REPORT

03/09/98
PAGE 318

DESCRIPTION	USGE REPL MYY U/I	*** YEAR-TO-DATE *** RECPTS ISSUES TRNFRS	FSB QTY	PKG QTY	O/O QTY	SURP QTY	MSO QTY	UNIT	COST	OH-VALUE	OH-QTY	PART NUMBER
OPTIFLO-III BRK 49 * 0398 LB		250 185	200	50					4.90	1225.23	250	516.00772
CHEMICAL VERSAS 99 * 0398 LB		550 1093	1000	50					1.34	1407.22	1043	516.00789
CAT-3 ACT-55 GA 49 * 0298 GAL		490 408	110	55					5.22	1725.55	330	516.00792
CAT-3 ACTIVATOR 49 * 0298 GAL		160				10			7.60	1293.31	170	516.00793
BF-1 BFG AGENT 49 * 0298 GAL		110 110							11.34	1247.77	110	516.00809
XL-1-ACID CRSLN 49 * 0198 GAL		220 225							3.44	741.53	215	516.00810
SAND-16/30 MESH 89 0398 SCK		4087 3917	10000		25913				2.09	9276.45	4432	516.00818
ANHIB II INHIBI 49 * 0298 GAL		20	15	5		30	5		14.15	707.70	45	516.00854
CL-28M XLINKER- 49 * 0697 GAL						385			6.07	2338.78	385	516.00855
MICRO FLY ASH-5 49 * 0198 LB		350	2500			1250			.21	812.59	3750	516.00860
HAI-81M-INHIBIT 99 * 0398 GAL		440 514	220	55	51	8			12.00	8018.93	668	516.00883
BE-3S SOLID BIO 99 1297 LB						40			11.50	460.00	40	516.00895
CL-31 CROSSLINK 99 * 1297 GAL			110	55	18	860			5.68	5516.48	970	516.00896
PERM A ADDITIVE 99 1297 GAL						70			15.07	1055.49	70	516.00901
PERM C ADDITIVE 99 * 1197 LB						108			20.71	2237.14	108	516.00903
MUSOL E SOLVENT 89 0298 GAL		220 100							6.11	1192.02	195	516.00906
SSD-21M WINTER- 99 * 0398 GAL		660 1276	880	55		211			5.90	6442.90	1091	516.00907
OPTIFLO HTE BRK 89 * 0398 LB		145	100	50		180			14.87	4164.60	280	516.00908
VICON NF BRKR-5 49 * 0398 GAL		1540 1382	330	55	12				4.54	4246.65	935	516.00954
VICON NF BRKR-H 49 * 0298 GAL		330		110					3.75	112.50	30	516.00955
PROPURAP PROP F 99 * 1097 LB						690			2.67	1843.14	690	516.00968
MAX SEAL FL LOS 99 * 1296 LB						55			.60	33.00	55	516.00969
MORFLO III SURF 99 * 0997 GAL						55			9.17	504.68	55	516.01010
HYFLO IV M SURF 99 * 0398 GAL		25	25	5					8.48	212.14	25	516.01039
MORFLO III SURF 99 * 0398 GAL		165 190	80	5					9.85	778.78	79	516.01066
BC-2 CROSSLINK 49 * 0398 GAL		165 724	990	55					5.87	5545.83	944	516.01080
BC-200 CRSSLNKR 89 * 0198 GAL			660	330					8.99	.00		516.01162
SANDWEDGE - 330 99 * 0398 GAL		2100 2395	1320	300	150				11.13	24852.18	2231	516.01167

PROGRAM FW180
5-55930 ** FARMINGTON, NM

HALLIBURTON ENERGY SERVICES
FIELD STOCK STATUS USAGE DATE
REPORT

03/09/99
PAGE 319

DESCRIPTION	USGE REPL MMY U/I	**-- YEAR-TO-DATE ---** RECPTS ISSUES TRNFRS	FSB QTY	PKG QTY	O/O QTY	SURP QTY	MSO QTY UNIT COST	OH-VALUE	OH-QTY	PART NUMBER
BC-200 CROSSLNK 89 * 0398 GAL		1980 1041	990	330	51		7.77	12671.04	1630	516.01173
FLOCELE- 3/8 - 89 * 0398 LB		9000 7530	3000	1000	642		.30	724.02	1657	890.50071
HR-5-50# SACK 49 * 1297 LB				50		625	1.20	750.15	625	890.50077
CAL-SEAL-100# B 89 * 0198 SCK			120	40	14		8.28	994.12	120	890.50131
CALCIUM CHLORID 89 * 0398 SCK		350 308	105	35	8		6	14.33	1792.30	119
FDP-F520-92- 55 * 1294 GAL						32	6.55	209.84	32	999.99228

WAREHOUSE INVENTORY TOTALS:

TOTAL PARTS 146

ESTIMATE ON ORD VALUE 794,863.39
ESTIMATE SURPLUS 84,567.87
ESTIMATE CURRENT FSB 417,376.80
ESTIMATE MSO VALUE 56,118.67

ON HAND VALUE 338,003.57
MSO & ON HAND VALUE 394,122.24

ATTACHMENT III

**TCLP ANALYSIS OF
WASHRACK
GRIT**

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-06-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5898	Date Received:	12-23-97
Sample Matrix:	Solid	Date Analyzed:	01-06-98
Preservative:	Cool	Date Extracted:	12-23-97
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.015	0.0001	5.00
Barium	1.62	0.001	100
Cadmium	0.001	0.0001	1.00
Chromium	0.006	0.0001	5.00
Lead	0.051	0.0001	5.00
Mercury	ND	0.0001	0.200
Selenium	ND	0.0001	1.00
Silver	ND	0.0001	5.0

ND - Parameter not detected at the stated detection limit.

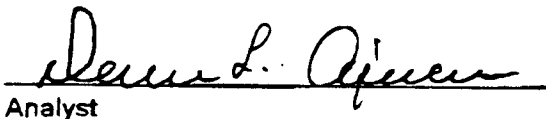
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

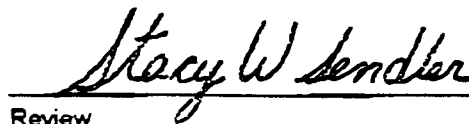
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by GFAA and Cold Vapor Techniques, SW-846, USEPA.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Halliburton, East Main St., Farmington, NM.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

January 7, 1998

Mr. Rick Greenacre
Halliburton Energy Services, Inc.
4109 East Main Street
Farmington, New Mexico 87401

Project No.: 92132

Dear Mr. Greenacre,


Enclosed are the analytical results for the sample collected from the wash bay located at the Halliburton facility on East Main St. in Farmington, New Mexico. One composite sample of wash bay solids was collected by Envirotech personnel on December 23, 1997, and delivered to the Envirotech laboratory on December 23, 1997 for Hazardous Waste Characterization analysis (Volatiles, Semi-Volatiles, Trace Metals, Corrosivity, Ignitability, and Reactivity).

The sample was documented on Envirotech Chain of Custody No. 5698 and assigned Laboratory No. C728 for tracking purposes. The sample was analyzed 12/23/97 through 01/06/98 using USEPA or equivalent methods.

Results of the analysis indicate that the material contained in the sample from the referenced location is not a characteristic hazardous waste as defined by 40 CFR Section 261, Subpart C for the noted compounds.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.


Stacy W. Segler
Environmental Scientist/Laboratory Manager

enc.

SWS/sws

92132/tclp1298.lb3

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	12-29-97
Lab ID#:	C728	Date Sampled:	12-23-97
Sample Matrix:	Soild	Date Received:	12-23-97
Preservative:	Cool	Date Analyzed:	12-23-97
Condition:	Cool & Intact	Chain of Custody:	5698

Parameter	Result
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IGNITABILITY: Negative

CORROSIVITY: Negative 8.52

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
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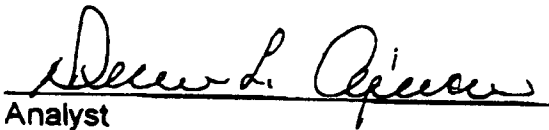
IGNITABILITY: Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.
(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

CORROSIVITY: Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.
(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

REACTIVITY: Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23.
(i.e. Violent reaction with water, strong base, strong acid, or the generation
of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Halliburton, East Main St., Farmington, NM.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-02-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5898	Date Received:	12-23-97
Sample Matrix:	Solid	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	12-31-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

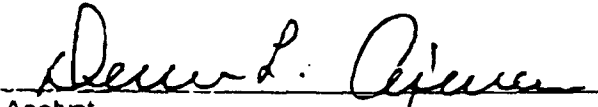
ND - Parameter not detected at the stated detection limit.

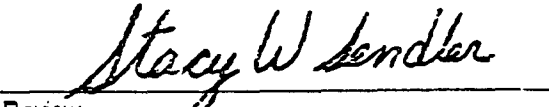
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	98%
	Bromofluorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Halliburton, East Main St., Farmington, NM.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040 PHENOLS

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-02-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5698	Date Received:	12-23-97
Sample Matrix:	Solid	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	01-02-98
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	100%
	2,4,6-Tribromophenol	98%

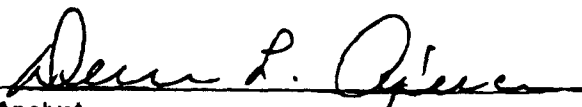
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

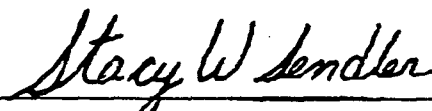
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Halliburton, East Main St., Farmington, NM.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-02-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5698	Date Received:	12-23-97
Sample Matrix:	Solid	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	12-31-97
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	0.189	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.047	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	0.030	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

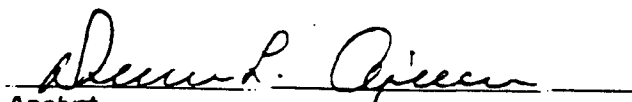
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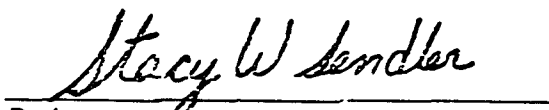
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Halliburton, East Main St., Farmington, NM.


Analyst


Review

ATTACHMENT IV

FACILITY ASSESSMENTS (EXAMPLE)

MONTHLY FACILITY ASSESMENT RESPONSIBILITIES

Feb. 1998

WORK AREA	SUPERVISOR	RESPONSIBLE PERSON	COMPLETION DATE
✓ Service Center Bldgs	G. Freidline	Melissa Spencer	
✓ Laboratory	B. Petersen	Teresa White	
✓ Office Trailer	G. Freidline	Melissa Spencer	
✓ Warehouse	G. Przekurat	Ray Cartwright	
Oil Storage	E. Shannon	Jim Robinson	
Cement Shop	R. Emde	Randy Snyder	
Wash Bays	E. Shannon	Jim Robinson	
✓ N ² Shop	T. Collins	Pat Kemper	
✓ Tool Shop	C. Lasster	Rick Greenaker	
Cement Head Shop	R. Emde	Randy Snyder	
✓ Bulk Plant	G. Przekurat	Gene Roberts	
✓ Tech Room/Coiled Tubing	B. Petersen	Max Pedigo	
✓ Pfac Shop	T. Collins	Noel Hermanson	
Painting/Blasting Shop	E. Shannon	Jim Robinson	
✓ Chemical Dock/Warehouse	G. Przekurat	Richard Nye	
Mechanic Shop	E. Shannon	Jim Robinson	
✓ Logging Shop	S. Hash	Mike Nix	
✓ LGC Plant	G. Przekurat	Gary Dobbs	
✓ Sand Plant	G. Przekurat	Gary Dobbs	
Fuel Island	N/A	N/A	
Yard	E. Shannon	Brian Higgins	

highlighted ones are missing

(2)

INSPECTOR:

DATE	DESCRIPTION	LOCATION	STATUS	REMARKS
02-09-98	Warehouse	USA to make designated area for		
02-09-98	Warehouse Environment	Hazardous waste storage area for hazardous waste storage,	Very Bad	Discussed w/Theris but not completed
02-09-98	Tool Shop	Tool, can in wash bay	" "	"
02-09-98	Tool Shop	Fire extinguishers need new sign, need to replace one by back door	Red Greenaker Ordered them	02-09-98
02-09-98	Tool Shop	Open line draining on floor of wash bay	Red Greenaker Ordered them	02-09-98
02-09-98	Laboratory	NOISE	N/A	N/A
02-14-98	Service Center Bldg	Housekeeping - wall studs in hallway need to be removed electrical conduit cords need to be tied up. Private room need to be cleaned, all cleaning chemicals need to be in one place.	N/A	03-17-98
02-14-98	Office Trailer	Housekeeping - Clutter of boxes in vacuum operated electrical cords, computer cords need to be tied up, all cleaning chemicals need to be in one place.	N/A	02-16-98
02-14-98	Tech Room	NOISE	N/A	N/A
02-13-98	Fire Room	NOISE	N/A	N/A
02-13-98	Log Shop	NOISE	N/A	N/A
02-12-98	Sand Plant	NOISE	N/A	N/A
02-12-98	Chemical Waste Terminal	No fire extinguisher, Do not store chemicals in plant	Reduced noise	03-01-98

WAREHOUSE HSE INSPECTION

Facility Location: FARMINGTON Time: 1100

Inspection for the ^{month} ~~week~~ of FEB by: WR CARTWRIGHT

Objective: Ensure the Health & Safety of employees and public while protecting the Environment.

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the materials warehouse. Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	N/A		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	N/A		
Hazardous waste storage area inspected weekly. ²	✓		
Hazardous waste storage area inventory up-to-date. ²	✓		
Hazardous waste storage area properly designated. ²		✓	NEED TO MAKE DESIGNATED ARE
Full or partial containers stored with bungs and lids in place.	NA		
All partials easily identified.	N/A		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.	NA		
All empty containers have product labels.	NA		
Empty drums stored horizontal with bungs in place.	NA		
Empty storage area properly designated. ²	NA		
All liquid chemicals secondarily contained.	NA		
Air compressor equipped with condensate capture vessel.	NA		
Air compressor condensate vessel properly maintained.	NA		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

WAREHOUSE ENVIRONMENTAL INSPECTION

Facility Location: Farmington, NM Time: 11:20
 Inspection for the week of Feb by: WRC Carter

Objective: Pollution Prevention/Waste Minimization

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the materials warehouse. Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	NA		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	NA		
Hazardous waste storage area inspected weekly. ²		✓	NEED TO MAKE A DESIGNATED ARE
Hazardous waste storage area inventory up-to-date. ²	NA		
Hazardous waste storage area properly designated. ²		✓	SEE ABOVE
All containers are leak free.	NA		
Full or partial containers stored with bungs and lids in place.	NA		
All partials easily identified.	NA		
All product storage containers have product labels.	NA		
Empty chemical containers stored in designated area.	NA		
All empty containers have product labels.	NA		
Empty drums stored horizontal with bungs in place.	NA		
All liquid chemicals secondarily contained.	NA		
Air compressor equipped with condensate capture vessel.	NA		
Air compressor condensate vessel properly maintained.	NA		

WAREHOUSE ENVIRONMENTAL INSPECTION

Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

LABORATORY

Page 1

Facility Location: LABORATORY Time: 4:00pm
 Inspection for the week of 2-14-98 by: Teresa White

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the _____ . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	✓		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	✓		
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place.	N/A		
All partials easily identified.	N/A		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.	✓		
All empty containers have product labels.	✓		
Empty drums stored horizontal with bungs in place.	✓		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	N/A		
Air compressor condensate vessel properly maintained.	N/A		
Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

TOOL SHOP

Page 1

Facility Location: FARMINGTON Time: 09:40
 Inspection for the week of FEB 9, 1998 by: R. J. Breenaker

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the _____ . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TRASH CAN IN WASH BAY FULL
Fire extinguishers properly maintained. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NEED NEW SIGN, COVERED OLD SIGN @ DOOR
Spill kits properly maintained. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NEED TO REPLACE 1 BY DASH 1500
Personnel Protective Equipment (PPE) guidelines followed. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper waste management guidelines followed. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Flammable Cabinet properly maintained. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Equipment and hand tools properly maintained. ¹	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
All containerized waste properly labeled. ²	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NA
All containers are leak free.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Full or partial containers stored with bungs and lids in place.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
All partials easily identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
All product storage containers have product labels.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Empty chemical containers stored in designated area.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NA
All empty containers have product labels.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Empty drums stored horizontal with bungs in place.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NA
All liquid chemicals secondarily contained.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Air compressor equipped with condensate capture vessel.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	- OPEN LINE DRAINS OUT OF WASH BAY
Air compressor condensate vessel properly maintained.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Area clean and free of chemical spills.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

2 - EMPTY
 FULL
 COVER

SERVICE CENTER BLDGS.

Facility Location: Farmington um Time: 3:45pm
 Inspection for the week of Feb 1998 by: Melissa Spencer

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓	✓	well covered in bell way need take more
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	N/A		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	N/A		
Equipment and hand tools properly maintained. ¹	N/A		
All containerized waste properly labeled. ²	N/A		
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place.	N/A		
All partials easily identified.	N/A		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.	N/A		
All empty containers have product labels.	N/A		
Empty drums stored horizontal with bungs in place.	N/A		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	N/A		
Air compressor condensate vessel properly maintained.	N/A		
Area clean and free of chemical spills.	✓		

Electrical Cords need to be plastic tie
 Printer room needs cleaning

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

LGC PLANT

Page 1

Facility Location: Farmington Time: 1300 PM
 Inspection for the week of Feb 6 by: Gary Bess
mm

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹ <u>N/A</u>			
Spill kits properly maintained. ¹	✓		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹ <u>N/A</u>			
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	✓		
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place.	✓		
All partials easily identified.	✓		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.	✓		
All empty containers have product labels.	✓		
Empty drums stored horizontal with bungs in place.	✓		
All liquid chemicals secondarily contained.	✓		
Air compressor equipped with condensate capture vessel. <u>N/A</u>			
Air compressor condensate vessel properly maintained. <u>N/A</u>			
Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

SAND PLANT

Page 1

Facility Location: Farmington Time: 1330 PM
 Inspection for the week of Feb by: GARY ROSS
 month

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹ N/A			
Spill kits properly maintained. ¹ N/A			
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹ N/A			
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ² N/A			
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place. N/A			
All partials easily identified. N/A			
All product storage containers have product labels. N/A			
Empty chemical containers stored in designated area. N/A			
All empty containers have product labels. N/A			
Empty drums stored horizontal with bungs in place. N/A			
All liquid chemicals secondarily contained. N/A			
Air compressor equipped with condensate capture vessel. N/A			
Air compressor condensate vessel properly maintained. N/A			
Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

NITROGEN SHOP

Page 1

Facility Location: Farmington Time: 0930
 Inspection for the week of Feb 9, 1998 by: Pat Kemper

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the _____ . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹			N/A
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹			N/A
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²			N/A
All containers are leak free.			N/A
Full or partial containers stored with bungs and lids in place.			N/A
All partials easily identified.			N/A
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.			N/A
All empty containers have product labels.			N/A
Empty drums stored horizontal with bungs in place.			N/A
All liquid chemicals secondarily contained.			N/A
Air compressor equipped with condensate capture vessel.			N/A
Air compressor condensate vessel properly maintained.			N/A
Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

FRAC SHOP

Page 1

Facility Location: Farmington N.M. Time: 15:00
 Inspection for the week of 2-13-98 by: Noel Hermanson

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the Frac Room. Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	X		
Fire extinguishers properly maintained. ¹	X		
Spill kits properly maintained. ¹	N/A		
Personnel Protective Equipment (PPE) guidelines followed. ¹	X		
Proper waste management guidelines followed. ¹	X		
Flammable Cabinet properly maintained. ¹	X		
Equipment and hand tools properly maintained. ¹	X		
All containerized waste properly labeled. ²	X		
All containers are leak free.	X		
Full or partial containers stored with bungs and lids in place.	N/A		
All partials easily identified.	N/A		
All product storage containers have product labels.	N/A		
Empty chemical containers stored in designated area.	N/A		
All empty containers have product labels.	N/A		
Empty drums stored horizontal with bungs in place.	N/A		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	N/A		
Air compressor condensate vessel properly maintained.	N/A		
Area clean and free of chemical spills.	X		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

TECH ROOM

Page 1

Facility Location: main SF yard Time: 11:30
 Inspection for the week of Feb by: MAX Pedge

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the warehouse. Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	N/A		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	N/A		
All containers are leak free.	N/A		
Full or partial containers stored with bungs and lids in place.	N/A		
All partials easily identified.	N/A		
All product storage containers have product labels.	N/A		
Empty chemical containers stored in designated area.	N/A		
All empty containers have product labels.	N/A		
Empty drums stored horizontal with bungs in place.	N/A		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	N/A		
Air compressor condensate vessel properly maintained.	N/A		
Area clean and free of chemical spills.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

OFFICE TRAILER

Page 1

Facility Location: Farmington, nm Time: 3:45pm
 Inspection for the week of Feb. 1998 by: Melissa Spencer

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the _____ . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹		✓	cluster of boxes in vacant office, electrical cords need to be posted
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	N/A		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	N/A		
Equipment and hand tools properly maintained. ¹	N/A		
All containerized waste properly labeled. ²	N/A		
All containers are leak free.	N/A		
Full or partial containers stored with bungs and lids in place.	N/A		
All partials easily identified.	N/A		
All product storage containers have product labels.	N/A		
Empty chemical containers stored in designated area.	N/A		
All empty containers have product labels.	N/A		
Empty drums stored horizontal with bungs in place.	N/A		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	N/A		
Air compressor condensate vessel properly maintained.	N/A		
Area clean and free of chemical spills.	✓		

All cleaning chemicals need to be stored in one area

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

CHEMICAL / LGC TERMINAL ENVIRONMENTAL INSPECTION

Item	Yes	No	Corrective Action
Air compressor equipped with condensate capture vessel. <i>N/A</i>			
Air compressor condensate vessel properly maintained. <i>N/A</i>			
Waste management documents placed in facility files. <i>?</i>			
All electric equipment grounded. <i>✓</i>			
Lighting in working condition. <i>✓</i>			
Equipment guards in place. (compressors, motors, etc.) <i>✓</i>			
Air compressor equipped with condensate capture vessel. <i>N/A</i>			
Condensate capture vessel properly maintained. <i>N/A</i>			
Equipment free of leaks and drips. <i>✓</i>			

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

INSPFRM.XLS2/10/98

CHEMICAL / LGC TERMINAL ENVIRONMENTAL INSPECTION

Facility Location: FARMINGTON Time: 1300 PM
 Inspection for the ^{month} week of FEB. Name (print): GARY DOSS

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the Chemical and LGC loading facilities. Conduct weekly inspections of the loading docks, secondary containment, and chemical storage areas. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹ <u>N/A</u>			<u>NO FIRE EXTINGUISHER</u>
Spill kits properly maintained. ¹	✓		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹ <u>N/A</u>			
Equipment and hand tools properly maintained. ¹	✓		
All containerized waste properly labeled. ²	✓		
Employee right to know station accessible and up-to-date.	✓		
Area clean and free of chemical spills.	✓		
Evidence of acid fume release. (odor and/or corrosion)		✓	
Storm/waste water present in any secondary containment.		✓	
Evidence of waste chemicals in secondary containment.		✓	
Acid returns neutralized on trucks. <u>N/A</u>			
Acid returns pH and volume documented prior to discharge. <u>N/A</u>			
Vendor off loading procedure in place and followed.	✓		
Full or partial containers stored with bungs and lids in place.	✓		
All partials easily identified.		✓	<u>DO NOT store partials in PLANT</u>
All empty containers have product labels.	✓		
Empty drums stored horizontal with bungs in place. <u>N/A</u>			
All liquid chemicals secondarily contained.	✓		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

FACILITY YARD / PARKING AREA HSE INSPECTION

Facility Location: Halliburton 4109 Emain.

Time: 12:00

Inspection for the week of 2/13/98

by: Brian Higgins

Objective: Ensure the Health & Safety of employees and public while protecting the Environment.

Pollution prevention and proper facility maintenance are essential to the successful and cost effective operation of the facility. Conduct monthly inspections of the facility yard and parking areas. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator. Verify and document corrective action.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	X		all but the med.
Fire extinguishers properly maintained. ¹	X		
Spill kits properly maintained. ¹	X		one of them need to be till. the one in front of the back room
Personnel Protective Equipment (PPE) guidelines followed. ¹			Na
Proper waste management guidelines followed. ¹	X		
Flammable Cabinet properly maintained. ¹			Na
Equipment and hand tools properly maintained. ¹			Na
Equipment properly stored and parked.	X		
Spills and drips addressed immediately.		X	52985 Antifreeze
Trash and debris present in yard / parking area.	X		We need some in the lower part of the yard, Emp Parking.
Scrap iron covered and stored neatly and off the ground.	X		
Trash bins have regulated waste. (buckets, liquids, etc.)	X		
Empty containers not in designated area.	X		
Warning signs properly posted and in good condition.	X		
Facility looks presentable to public.		X	Maximize mauer need to be clean before they are put in front
Facility lighting in good condition.		X	3-2, 5-1, 8-2, 10-1, -

¹ Refer to inspection guidelines on back of this form.

Front + Ilvan - 2, Back Ilvan - 1

LOGGING SHOP

Page 1

Facility Location: FARMINGTON Time: 11:00
 Inspection for the week of 2-9-98 by: 11:00 M. J. 267

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the _____ . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	✓		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹		✓	LOGGING SHOP NEEDS NEW GRINDING WHEEL AND WIRE BRUSH
All containerized waste properly labeled. ²	✓		
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place.	✓		
All partials easily identified.	✓		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.	N/A		
All empty containers have product labels.		✓	LABEL GUN SCRAP METAL H2O CAN CEMENT MIXER WATER
Empty drums stored horizontal with bungs in place.	N/A		
All liquid chemicals secondarily contained.	N/A		
Air compressor equipped with condensate capture vessel.	✓		BOTTOM TANK DRAIN DRAINS OUT ON TO SHOP FLOOR
Air compressor condensate vessel properly maintained.	✓		
Area clean and free of chemical spills.	N/A		

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

CHEMICAL DOCK/WAREHOUSE

Page 1

Facility Location: Farmington Time: 3:00 PM
 Inspection for the week of FEB by: Richard NYE

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the . Conduct weekly inspections of the warehouse and immediate area, covered drum storage area, empty drum storage area, and hazardous waste storage area. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹		✓	Full time Job to keep clean
Fire extinguishers properly maintained. ¹		✓	I think we should have a class C Extinguisher
Spill kits properly maintained. ¹		✓	NEED SHovel + Rubber Gloves
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹	✓		
Equipment and hand tools properly maintained. ¹	N	A	
All containerized waste properly labeled. ²	✓		
All containers are leak free.	✓		
Full or partial containers stored with bungs and lids in place.	✓		
All partials easily identified.	✓		
All product storage containers have product labels.	✓		
Empty chemical containers stored in designated area.		✓	
All empty containers have product labels.	✓		
Empty drums stored horizontal with bungs in place.		✓	
All liquid chemicals secondarily contained.	✓		
Air compressor equipped with condensate capture vessel.	N	A	
Air compressor condensate vessel properly maintained.	N	A	
Area clean and free of chemical spills.		✓	

¹ Refer to inspection guidelines.

² Refer to Environmental Compliance Waste Storage and Transportation manual.

BULK MATERIALS PLANT HSE INSPECTION

Facility Location: FARMINGTON, NM

Time: 0900

Inspection for the week of FEB.

by: GENE ROBERTS

Objective: Ensure the Health & Safety of employees and public while protecting the Environment

Pollution prevention and waste minimization are essential to the successful and cost effective operation of the bulk materials plant. Conduct monthly inspections of the plant and immediate area as noted below. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator. Verify and document corrective action.

Item	Yes	No	Corrective Action
House keeping guidelines being followed. ¹	✓		
Fire extinguishers properly maintained. ¹	✓		
Spill kits properly maintained. ¹	✓		
Personnel Protective Equipment (PPE) guidelines followed. ¹	✓		
Proper waste management guidelines followed. ¹	✓		
Flammable Cabinet properly maintained. ¹ <u>N/A</u>		✓	<u>DO NOT HAVE ONE</u>
Equipment and hand tools properly maintained. ¹	✓		
All tanks and piping are adequate and leak free.			
Dust collector maintenance procedures in place and followed. ²	✓		
Regular inspections completed and documented ²	✓		
Area free of loose cement / additives.	✓		
Waste cement and samples properly managed.	✓		
All liquid chemicals secondarily contained.		✓	<u>NOT ENOUGH ROOM</u>
Plant operating procedures current and followed. ²	✓		
Vendor off loading procedure in place and followed. ²	✓		
Air compressor dump piped to condensate vessel.	✓		<u>DUE HIGH PRESS. COMP. DOESN'T</u>
Air compressor condensate vessel checked for fluid level.	✓		
Evidence of recent cement or additive dust release.	✓		
Empty chemical containers stored in designated area.	✓		
All partials easily identified.	✓		

¹ Refer to inspection guidelines on back of this form.

² Refer to Bulk Materials Maintenance Manual.

ATTACHMENT V

STORMWATER POLLUTION PREVENTION PLAN (FORTHCOMING)

**STORM WATER POLLUTION PREVENTION
PLAN**

HALLIBURTON ENERGY SERVICES

**4109 East Main Street
Farmington, New Mexico**

INTRODUCTION

The purpose of the Plan is to protect water quality by reducing the amount of pollutants in storm water runoff. These pollutants come from two sources: 1) our outdoor activities, and 2) atmospheric deposition over which we have no control. The Plan covers the entire facility.

1.1 Purpose of the SWPPP

Company Policy requires us to prepare a Storm Water Pollution Prevention Plan (SWPPP). It describes the measures that we will take to protect stormwater quality. This plan is to be kept on the premises.

1.2 BMP Implementation Committee

The Policy requires that the SWPPP identify personnel to oversee the implementation of any measures to reduce pollution, called Best Management Practices (BMP), and to modify the SWPPP as necessary over time. We have formed a team, which participated in the preparation of this plan and will oversee its implementation.

1.3 Implementation Schedule

All of the recommendations of BMPs made by the team (that do not involve the expenditures of capital funds) are to be implemented by the end of April 1998.

1.4 Protocol on Public Access to the SWPPP

Although this is a Company plan, meant for the use by our employees, it is a public document. Representatives of Government who visit the Facility are allowed direct access to the plan when on site. Any request for a copy of the plan is to be forwarded to the Area Health, Safety and Environment Manager.

**Business Definition
Farmington District**

The Farmington District facility is located at 4109 E. Main Farmington N. M. 87402. The Primary services provided are hydraulic fracturing, cementing, and acidizing oil and gas wells.

Maintenance of trucks and loading of bulk materials occur at the facility. Truck maintenance is performed in an enclosed shop that is self-contained. Trucks are washed in enclosed structure, water from the wash rack discharge to the sewer. Solids are tested annually and disposed of at a certified solid waste land farm.

A complete list of commonly used chemicals stored at the facility is attached. Loading and unloading of all bulk liquids is done in contained areas. Dry bulk materials stored at the facility include cement, gel, silica flour, gilsonite and sand. Dust collectors are used to control emissions from the bulk plant.

Sacked dry chemicals are stored in either a covered area, or in an enclosed building. Drummed liquid chemicals may either be stored in an enclosed building, covered area, or in the open. All liquid chemicals are stored within secondary containment. All chemicals are stored on cement or paved surfaces.

The facility was not built to contain stormwater runoff or to divert stormwater runoff.

Site Assessment

Halliburton Services- Farmington District

Material Inventory:

A variety of materials are stored in several different forms, the majority of, which are stored in covered or contained areas.

Chemical Terminal:

HCL acid is stored, in a concentrated form, in a sealed tank. This tank is inside a coated concrete containment structure. Connections for loading of the HCL acid tank are also inside the structure. Any spills occurring inside the structure are immediately recovered and reused. An inspection of the facility found no leaks.

Additional additives are stored in the acid additive drum storage area. Additives are either stored in closed drums or in large bulk portable containers. There is minimal exposure of these drummed chemicals to storm water because the chemicals are stored and handled within secondary containment. Any stormwater that is captured in the containment is recovered and reused for acid blending.

Acid is loaded into Halliburton transports overhead through a hatch on the top of the transport. The transport is situated on a coated concrete, contained loading bay during this process. The loading bay is equipped with a retaining pit and concrete berm to contain any spill. Any spills are immediately recovered and reused.

LGC Terminal:

LGC is a concentrated polymer solution containing gel and diesel. LGC is stored at the terminal in sealed tanks. All tanks are located within concrete containment. All mixing and loading of the LGC occurs on the cement structure. Any spills occurring inside the structure are immediately cleaned and properly disposed. An inspection of the facility found no leaks.

Cement Bulk and Sand Bulk Storage and Admix Building:

Bulk cement, bulk sand, proppants and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement materials warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed of.

Mixing and transfer of materials from the plant to a bulk truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk additives.

Maintenance Shop:

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation that is self-contained. Any spills are cleaned up using an absorbent and properly disposed.

Trucks are serviced in the main shop. All used oil is discarded in a Used Oil tank. The used oil tank is located in the wash rack within secondary containment. Used oil filters are drained at least 12 hour and placed in sealed drum and shipped back to our Duncan OK TSDF for reclamation.

Grease Shop:

Trucks are lubricated in this shop. Lubricants are stored in sealed bulk storage tanks and sealed drums in a self contained, concrete floored, covered shop. Any spills occurring inside the grease shop are immediately cleaned and properly disposed.

Wash Rack:

Truck washing is performed in an enclosed structure. Each wash bay is equipped with a floor drain, which separates solids and skims oil. These drain to a three-stage separation facility that empties to city sewer.

Drum Storage Area:

Chemicals are stored in sealed portable containers or drums. This area is paved and curbed with asphalt. Inspections of this area are performed daily with any spills detected immediately cleaned and properly disposed.

Miscellaneous:

In addition to the previously described management practices the following are also in effect: Trash containers are conveniently located throughout the facility and regularly emptied by a waste handling service. Paved surfaces are inspected and cleaned as required. Used drums, sacks, pallets, etc. are properly discarded. Reusable drums are returned. Non-use areas are cleaned of weed and debris as needed. Management maintains a good housekeeping policy.

Past Spills, and Leaks:

There have been no significant spills at this facility in the past three years.

Non-Storm Water Discharges:

There is significant stormwater runoff onto our property from the city street system and leaves our property to the south. There is no system set up at the present time to contain the water runoff.

POLLUTION PREVENTION TEAM**MEMBERSHIP ROSTER****Worksheet #1**Completed by: TERESA WHITETitle: Health, Safety & Environmental Team LeaderDate: 03/18/98**Facility Information:**4109 East Main St.

Physical Address (actual physical location):

Same as above

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

Farmington, New Mexico 87402

City

State

Zip

Team Leader: TERESA WHITETitle: LAB TECHNICIANPhone: (505) 324- 3500

Responsibilities: TO PROVIDE THE LEADERSHIP TO ENSURE THE DEVELOPMENT & IMPLEMENTATION
OF THE STORMWATER POLLUTION PREVENTION PLAN. LEAD ONGOING COMPLIANCE, REVIEW & UPDATE
OF THE PLAN.

Members:

1. James Robinson

Title: MECHANIC

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

2. Rick Greenacker

Title: Tool repair tech

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

3. BUDDY PETERSON

Title: Operations Engineer

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.

4. Dale Kalcich

Title: Team Leader Stimulation

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

5. Gary Dobbs

Title: Material Specialist

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

6. Ray Cartwright

Title: Material Specialist

Responsibilities: TO ASSIST IN DEVELOPMENT & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.

Date: 03/18/98

Zip

[illegible]

DESCRIPTION OF EXPOSED SIGNIFICANT MATERIAL

Worksheet #3a

Completed by: Teresa White

Title: Health, Safety & Environmental Team Leader

Date: 3/18/98

Facility Information:

Physical Address (actual physical location):

4109 East Main St

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

Farmington, New Mexico 87402

City

State

Zip

Instructions: Based on your material inventory, describe the significant materials that were exposed to storm water during the past three years and/or are currently exposed.

Description of Exposed Significant Material	Period of Exposure	Quantity Exposed (Units)	Location (as indicated on the site map)	Method of Storage or Disposal (e.g., pile, drum, tank)	Description of Material Management Practice (e.g., pile covered, drum sealed)
Chemicals, Liquid	continual	2500 Gallons	Drum Storage Area	Drums on Pallets or Hal Tanks	Secondary containment, sealed containers, proper handling procedures
Chemicals, Dry	Briefly while loading and unloading	+ 25,000 pounds	Chemical Warehouse	Pallets	Stored inside warehouse, loaded and unloaded outside
Cement	None	bulk	In Northeast Corner	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Sand	None	bulk	East Center	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Iron Storage	continual	Various	East Center	Stacked on Pallets	Keep Painted , Minimize storage time
Wash Rack Grit	continual	25 cubic yards	Northeast Corner near wash bays	Stored in concrete walled area	Kept in concrete storage until hauled to Land Farm
Excess Cement Storage	Small amount of spilled material	residual amounts	South East Corner	Sealed storage vessels	Loading & unloading Pneumatically done. Proper handling procedures

NON-STORM WATER DISCHARGE ASSESSMENT AND CERTIFICATION

Worksheet #5

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 3/18/1998

Location:

Pumping Service Facility

City Farmington ST New Mexico ZIP 87402

Date of Test or Evaluation	Outfall Directly Observed During the Test (Identify as Indicated on the Site Map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
10/15/94	located on the map as drainage area	rain event	n/a	oil and dirt	Gary Morris

CERTIFICATION

I, Jim Haney, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations.

A. Jim Haney Shared Services Supervisor

B. Area Code & Telephone # (505) 324-3500

C. Signature

D. Date Signed

NOTE: This worksheet **MUST** be signed by the Shared Services Supervisor.

NON-STORM WATER DISCHARGE ASSESSMENT AND FAILURE TO CERTIFY NOTIFICATION

Worksheet #6

Completed by: TERESA WHITE
Title: Health, Safety & Environmental Team Leader
Date: 3/18/1998

Location:

4109 East Main St Facility

City

Farmington ST

New Mexico ZIP 87402

Directions: If you cannot feasibly test or evaluate an outfall, fill in the table below with the appropriate information and sign this form to certify the accuracy of the included information.

List all outfalls not tested or evaluated, describe any potential sources of non-storm water pollution from listed outfalls, and state the reason(s) why certification is not possible. Use the key from your site map to identify each outfall.

Important Notice: A copy of this notification must be signed and submitted to the Director within 180 days of the effective date of this permit.

Identify Outfall Not Tested/Evaluated	Description of Why Certification is Infeasible	Description of Potential Sources of Non-Storm Water Pollution
NOT APPLICABLE		

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations, and that such notification has been made to the Director within 180 days of _____ (date permit was issued), the effective date of this permit.

A. Jim Haney Shared Services Supervisor

B. Area Code & Telephone # (505) 324-3500

C. Signature

D. Date Signed

POLLUTANT SOURCE IDENTIFICATION (Section 2.2.6)

Worksheet #7

Completed by: TERESA WHITE
Title: Health, Safety & Environmental Team Leader
Date: 3/18/1998

Location: 4109 EAST MAIN STREET

CITY FARMINGTON ST NM ZIP 87402

Instructions:

List all identified storm water pollutant sources and describe existing management practices that address those sources. In the third column, list BMP options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Option
1. Wash Bays	The wash bays are covered and enclosed on three sides. Mud and Grit removed periodically and area cleaned. Some overspray travels out of bays.	Good Housekeeping, and Inspections. Overspray controlled
2. Parking Areas	Oil and Grease on Parking areas. The area is inspected and cleaned at least monthly.	Regular Inspections, Preventative maintenance on equipment, designated parking areas ; cleanup weekly
3. Chemical Storage Area	Curbed, stormwater recovered and reused	Good Housekeeping ; Inspections ; Spill Prevention and response ; Proper practices and procedures
4. Chemical Terminal	All activities at Chemical Terminal is within secondary containment. All stormwater collected and reused.	Preventative Maintenance and Inspections Good housekeeping ; Improve Loading and Unloading Procedures
5. LGC Plant	All activities at LGC plant is within secondary containment. Stormwater collected and reused	Weekly inspections ; In containment ; Proper practices and procedures
6. Washrack Grit Drying Slab	Removed offsite periodically	New slab that drains to washbay sumps
7. Lubrication Bays	Clean up spills/leaks with absorbents	Good Housekeeping ; Preventative maintenance ; Inspections and proper work procedures
8. Bulk Cement Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping
9. Bulk Sand Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping
10. Empty Container Storage	Stored within secondary containment. Storwater allowed to dry	Cover with roof

BMP IDENTIFICATION (Section 2.3.1)

Worksheet #7a

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 3/18/1998

Location: 4109 East Main St Facility City Farmington ST New Mexico ZIP 87402

Instructions: Describe the Best Management Practices you have selected to include in your plan. For each of the baseline BMPs, describe actions that will be incorporated into facility operations. Also describe any additional BMPs (activity-specific and site-specific) you have selected. Attach additional sheets if necessary

Best Management Practices	Brief Description of Activities
GOOD HOUSEKEEPING	MATERIALS STORED PROPERLY. KEEP WORK AREAS ORGANIZED. ADDRESS SPILLS PROPERLY. PROVIDE COMPLETE MAINTENANCE AS NEEDED. CREATE & IMPLEMENT A "CLEAN " STANDARD. PERIODIC EMPLOYEE AWARENESS TRAINING.
PROPER WORK PROCEDURES AND PRACTICES	DEVELOP AND DOCUMENT PROPER WORK PRACTICES AND PROCEDURES TO MINIMIZE INCIDENTS.
PREVENTATIVE MAINTENANCE	COMPLETE PROPER PRE/POST TRIP INSPECTION RECORDING ANY DEFICIENCIES. IDENTIFY, SCHEDULE, RESPOND TO ANY DEFICIENCIES, IMPLEMENT ACCOUNTABILITY FOR EQUIPMENT AND WORK AREAS.
TIERED INSPECTIONS	COMPLETE DAILY, WEEKLY AND MONTHLY FACILITY SELF AUDIT. FOLLOW UP BY COMPLETING ACTION ITEMS IN A TIMELY MANNER. PRE / POST TRIP INSPECTIONS COMPLETED AND CORRECTIVE ACTION COMPLETED.
SPILL PREVENTION AND RESPONSE	MAINTAIN A TRAINED SPILL RESPONSE TEAM. AWARENESS TRAINING FOR ALL EMPLOYEES. FOLLOW PROPER MAINTENANCE PROCEDURES. GOOD HOUSEKEEPING. ADHERE TO INCIDENT REPORTING AND FOLLOW UP PROGRAM. SPILL KITS USED AND MAINTAINED.
SEDIMENT AND EROSION CONTROL	PAVING AND GRAVELING CERTAIN AREAS TO MINIMIZE EROSION.
STORMWATER RUNOFF MANAGEMENT	ENGINEERING CONTROLS. GOOD HOUSEKEEPING. SPILL PREVENTION AND RESPONSE. DIVERSION STRUCTURES TO CONTROL RUNON AND DIRECT RUNOFF.
RISK MANAGEMENT AND EVALUATION	USE RISK MANAGEMENT TECHNIQUES TO IDENTIFY AND CORRECT POTENTIAL ENVIRONMENTAL RISKS IN EVERYDAY ACTIVITIES.
QUARTERLY STORMWATER MONITORING	SAMPLE STORMWATER QUARTERLY TO EVALUATE RUNOFF QUALITY

IMPLEMENTATION (Section 2.4.1)

Worksheet #8

Completed by: TERESA WHITE
Title: Health, Safety & Environmental Team Leader
Date: 3/18/1998

Location: <u>4109 East Main Facility</u> City: <u>Farmington</u> ST: <u>New Mexico</u> ZIP: <u>87402</u>				
Instructions: Develop a schedule for implementing each BMP. Provide a brief description, the steps necessary for implementation (i.e., any construction or design), the schedule for completing those steps (list dates), and those responsible for implementation.				
BMP's	Description of Action Required for Implementation	Scheduled Completion Date	Person Responsible for Action	Description of Activities
Good Housekeeping	PSL, /Department Define Minimum expectations	On going	Team Leader/ PSL Coord/ Shared Services	Identify problems with tiered inspections, define Corrective Actions and assign responsible person
Preventative Maintenance	Provide resources & implement.	On going	Team Leader / Psl Coord /Shared Services	
	Follow up.	Ongoing		
	Employee Awareness Training	Ongoing	Team & MBU leader	
Inspections	Accountability	Ongoing	Team leader/ PSL Coord	
	Implement Daily, Weekly, & Monthly Inspections	Ongoing	HSE Team	
	Pre /Post Trip Inspections	Ongoing	Team Leader /MBU Member	
Spill Prevention and Response	Review Awareness Training.	At Team/ Bus Review Mtg.	Team Leader/HSE Team environmental Coord	
	Procedures Followed.	Ongoing	All Employees.	
Sodiment and Erosion Control	Maintain Paving	Ongoing	Shared Service Supervisor	Continue protect & gravel areas of exposed soil
Management of Runoff	See Good Housekeeping.	Ongoing	All Personal	
	See Inspections.			
Additional BMPs (Activity-specific and Site-specific)	Assign Parking Areas For Equipment	Ongoing	HSE Team /PSL Coord	

EMPLOYEE TRAINING (Section 2.4.2)

Worksheet #9

Completed by: TERESA WHITE
Title: Health, Safety & Environmental Team Leader
Date: 3/18/1998

Location: 4109 East Main St Facility City Farmington ST New Mexico ZIP 87402

Instructions: Develop a schedule for implementing each BMP. Provide a brief description, the steps necessary for implementation (i.e., any construction or design), the schedule for completing those steps (list dates), and those responsible for implementation.

Training Topic	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Spill Prevention and Response	Facility specific spill contingency plan and Hazwoper training	June 1998 and annual refresher	Selected Spill Response Team
Good Housekeeping	Tiered Inspection Program and Corrective Actions	April 1998 and annually thereafter	All Employees.
Material Management Practices	Material Management Training.	Ongoing	Materials Personnel
Other Topics	Environmental Awareness Training. Stormwater Pollution Prevention Training Waste Storage and Transportation Cement/Sand Plant Environmental Mgmt. Chemical Terminal Environmental Mgmt. Maintenance Shop Environmental Mgmt.	Ongoing Annually Annually Annually Annually Annually	All Employees All Employees Materials Personnel Bulk Plant Personnel Chemical Terminal Pers. Maintenance Personnel

Worksheet #3a

Completed by: Teresa WhiteDESCRIPTION OF
EXPOSED
SIGNIFICANT
MATERIALTitle: Health, Safety & Environmental Team LeaderDate: 3/18/98

Facility Information:

Physical Address (actual physical location):

4109 East Main St

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

Farmington, New Mexico 87402

City State Zip

Instructions: Based on your material inventory, describe the significant materials that were exposed to storm water during the past three years and/or are currently exposed.

Description of Exposed Significant Material	Period of Exposure	Quantity Exposed (Units)	Location (as indicated on the site map)	Method of Storage or Disposal (e.g., pile, drum, tank)	Description of Material Management Practice (e.g., pile covered, drum sealed)
Chemicals, Liquid	continual	2500 Gallons	Drum Storage Area	Drums on Pallets or Hal Tanks	Secondary containment, sealed containers, proper handling procedures
Chemicals, Dry	Briefly while loading and unloading	+ 25,000 pounds	Chemical Warehouse	Pallets	Stored inside warehouse, loaded and unloaded outside
Cement	None	bulk	In Northeast Corner	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Sand	None	bulk	East Center	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Iron Storage	continual	Various	East Center	Stacked on Pallets	Keep Painted , Minimize storage time
Wash Rack Grit	continual	25 cubic yards	Northeast Corner near wash bays	Stored in concrete walled area	Kept in concrete storage until hauled to Land Farm
Excess Cement Storage	Small amount of spilled material	residual amounts	South East Corner	Sealed storage vessels	Loading & unloading Pneumatically done. Proper handling procedures

ATTACHMENT VI

SPILL CONTINGENCY PLAN

(FORTHCOMING)

ATTACHMENT VII

**MAP SHOWING ONE
MILE RADIUS AND
WATER BODIES**



Halliburton Facility
and 1 Mile Radius

ATTACHMENT VIII

SUBSURFACE INVESTIGATION

san juan testing laboratory, inc.

PHONE:
327-9944

909 W. APACHE • P. O. BOX 2079 • FARMINGTON, NEW MEXICO 87401

March 11, 1975

Halliburton Services Co.
P. O. Drawer 960
Farmington, New Mexico

Attn. Raymond Gunn
District Superintendent

Re: Bulk Plant Addition
Halliburton Services Co.
Farmington, New Mexico

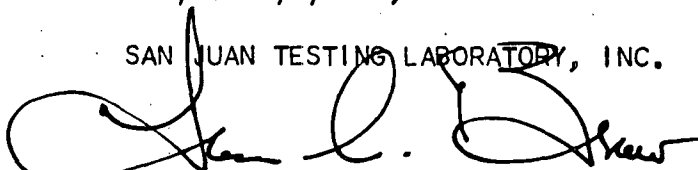
Dear Mr. Gunn:

Pursuant to your request, we have completed the subsurface investigation for the referenced plant expansion. The attached report includes test boring logs, soil resistivity summary, conclusions and recommendations regarding recommended foundation systems for the proposed bulk plant. If additional information is required, do not hesitate to contact us.

Pursuant to your instructions, we have forwarded two copies of this report to Mr. Jack Kramer with the Bulk Construction Department in Duncan, Oklahoma.

Very truly yours,

SAN JUAN TESTING LABORATORY, INC.


Lawrence A. Brewer, P.E.
President



LAB:bep

Attachments

CC: Jack Kramer

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

GENERAL CRITERIA

Three test borings were attempted beneath the proposed structures to depths of 7' to 9'. The test borings were located beneath the proposed addition as indicated on Project Drawing No. FC 268A dated January 1975. Said test holes were extended by rotary drilling utilizing an Acker Terado truck mounted drill rig to the depths indicated on the logs. Rotary drilling of gravel, cobbles and boulders is extremely difficult and expensive. For this reason, advancement of test borings was terminated at the depths shown. Backhoe test pits were considered but were rejected due to the potential damage to the existing parking lot paving. An alternate solution to advancing the test borings thru the use of a cable tool was the earth resistivity method.

Earth resistivity readings were taken at two locations in the project area as shown on Plate "A" at depth intervals of 3'. Resistivity readings were established thru the utilization of a Strata Scout resistivity meter, Model R-40, manufactured by Soil Test, Inc.. The electrode spacing and readout calculations are based on the Wenner method. The results of the resistivity readings are summarized on Sheets 6 and 7. The resistivity readings correlate with projected depths of the various subgrade strata as evidenced by the other subsurface investigations and by outcrops in the vicinity. A geologic cross section, Plate "B", indicates the projected subgrade strata beneath the site.

The location of the test holes and their relationship to the proposed plant expansion are shown on Plate "A". The boring logs, complete with laboratory analysis, AASHO classifications, in place moisture, penetration resistance, etc., are shown on Sheets 3, 4 and 5.

Substrata conditions at the site consist of sedimentary and alluvial deposits of clayey silt, sand, gravel and cobbles, with the entire site underlain by sandstone as evidenced by the resistivity survey and test borings completed for others and shown graphically on the geologic section, Plate "B".

Conclusions and recommendations regarding maximum bearing values, recommended footing systems and other data pertinent to the development of the project at the site are summarized on pages 8, 9 and 10.

TEST BORING LOG

DATE MARCH 11, 1975

CLIENT HALLIBURTON SERVICES

LAB NO. 18174

[illegible]

TEST BORING LOG

DATE MARCH 11, 1975

CLIENT HALLIBURTON SERVICES

LAB NO. 18175

[illegible]

TEST BORING LOG

LOCATION: Farmington, N.M.

LAB NO. 18176

[illegible]

SAN JUAN TESTING LAB, INC.
909 WEST APACHE
FARMINGTON, NEW MEXICO
RESISTIVITY SURVEY

CLIENT HALLIBURTON SERVICES

DATE MARCH 11, 1975

PROJECT ADMIX BUILDING

LOCATION FARMINGTON NEW MEXICO

HOLE NO. A LAB NO. 18177

COLLAR ELEV. 100.93

PROBE SETTING		DIRECTION					DIRECTION			
		DEPTH	OHMS	MHOS	LAYER MHOS	RESISTIVITY	OHMS	MHOS	LAYER MHOS	RESISTIVITY
1.5	4.5	0-3	33.3	.030	.030	19,000				
3.0	9.0	3-6	19.8	.051	.021	27,000				
4.5	13.5	6-9	11.7	.085	.034	17,000				
6.0	18.0	9-12	9.37	.107	.022	26,000				
7.5	22.5	12-15	7.84	.128	.021	27,000				
9.0	27.0	15-18	7.32	.137	.009	64,000				
10.5	31.5	18-21	6.69	.149	.012	48,000				
12.0	36.0	21-24	6.01	.166	.017	33,000				
13.5	40.5	24-27	5.01	.200	.034	17,000	A			
15.0	45.0	27-30	4.59	.218	.018	32,000				
16.5	49.5	30-33	4.52	.221	.003	192,000	B			
18.0	54.0	33-36								
19.5	58.5	36-39								
21.0	63.0	39-42								
22.5	67.5	42-45								
24.0	72.0	45-48								
25.5	76.5	48-51								
27.0	81.0	51-54								
28.5	85.5	54-57								
30.0	90.0	57-60								
31.5	94.5	60-63								
33.0	99.0	63-66								
34.5	103.5	66-69								
36.0	108.0	69-72								
37.5	112.5	72-75								

REMARKS

A - H₂O

B - SANDSTONE

SAN JUAN TESTING LAB, INC.
909 WEST APACHE
FARMINGTON, NEW MEXICO
RESISTIVITY SURVEY

CLIENT HALLIBURTON SERVICES

DATE MARCH 11, 1975

PROJECT ADMIX BUILDING

LOCATION FARMINGTON NEW MEXICO

HOLE NO. B LAB NO. 18178

COLLAR ELEV. 100.88

PROBE SETTING		DIRECTION					DIRECTION			
		DEPTH	OHMS	MHOS	LAYER MHOS	RESISTIVITY	OHMS	MHOS	LAYER MHOS	RESISTIVITY
RED	BLACK									
1.5	4.5	0-3	102.0	.010	.010	51,000				
3.0	9.0	3-6	53.8	.018	.008	72,000				
4.5	13.5	6-9	31.4	.027	.009	64,000				
6.0	18.0	9-12	25.7	.039	.012	48,000				
7.5	22.5	12-15	19.1	.052	.013	44,000				
9.0	27.0	15-18	15.9	.063	.011	52,000				
10.5	31.5	18-21	12.0	.083	.020	29,000				
12.0	36.0	21-24	9.9	.101	.018	32,000				
13.5	40.5	24-27	8.6	.116	.015	38,000				
15.0	45.0	27-30	7.67	.130	.014	41,000	A			
16.5	49.5	30-33	6.75	.148	.018	32,000				
18.0	54.0	33-36	5.69	.176	.028	20,500	B			
19.5	58.5	36-39	5.69	.178	.002	288,000				
21.0	63.0	39-42	5.92	.180	.002	288,000				
22.5	67.5	42-45								
24.0	72.0	45-48								
25.5	76.5	48-51								
27.0	81.0	51-54								
28.5	85.5	54-57								
30.0	90.0	57-60								
31.5	94.5	60-63								
33.0	99.0	63-66								
34.5	103.5	66-69								
36.0	108.0	69-72								
37.5	112.5	72-75								

REMARKS

A - H₂O

B - SANDSTONE

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

CONCLUSIONS & RECOMMENDATIONS

The subgrade strata encountered at the site as evidenced by this investigation is clayey silt, sand, gravel and cobbles, underlain by an extensive strata of sedimentary sandstone. No potentially expansive soil was encountered at the site. Free water could be encountered at a depth of 24'.

The correlation between new test borings, test borings and pits completed by others and the resistivity survey results is summarized graphically on the north-west south-east cross sections shown on Plate "A". The extent of the cobblestone layer, the water table and the surface of the sedimentary sandstone is approximate beneath the site since the resistivity survey is only accurate to approximately half the interval measured or approximately 2'.

We recommend that the footing system for the proposed plant expansion be founded at least 4' into the cobblestone strata.

The footing system may be composed of reinforced concrete footings and stem walls or spot footings with grade beams with footings founded as outlined above. The maximum soil pressure imposed by the footing system should not exceed 6,500 pounds per square foot for combined live and dead loads.

Footings adjacent to the existing facility should be founded at depths similar to those existing footings regardless of depth and should be sized on the basis of existing soil bearing pressures imposed by the existing structures. Settlement of the coarse granular non-cohesive soils is estimated to be less than 5/8" which total settlement should occur during construction.

The footing subgrade should be "over-excavated" to a minimum depth of 2" to eliminate the possibility of point bearing on any single boulder or cobble. Loose

gravel or cobbles should be removed from the excavation and the bottom of the footing excavation then brought back to "grade" with a non-plastic select backfill composed of crushed rock with the following gradation.

<u>Sieve Designation</u>	<u>Percent Passing by Weight</u>
1"	100%
No. 4	20%-45%
No. 200	0%-10%

The select backfill should be compacted to a density of 95% of the maximum density as determined by ASTM D-1557, Method "D", at optimum moisture content.

Interior load bearing walls or columns should be founded over spot footings with grade beams or continuous footings at depths similar to exterior footings in that area of the structure.

Interior slabs on grade should be isolated from all structural components of the footing system and should be founded over a 4" compacted subgrade composed of the select backfill as outlined above. A polyethylene vapor barrier should also be placed between the prepared subgrade and interior slabs. Interior non-load bearing partitions may be founded over thickened slabs, however, care should be exercised where such partitions join structural components through the placement of expansion joints or similar treatment to allow minor movement.

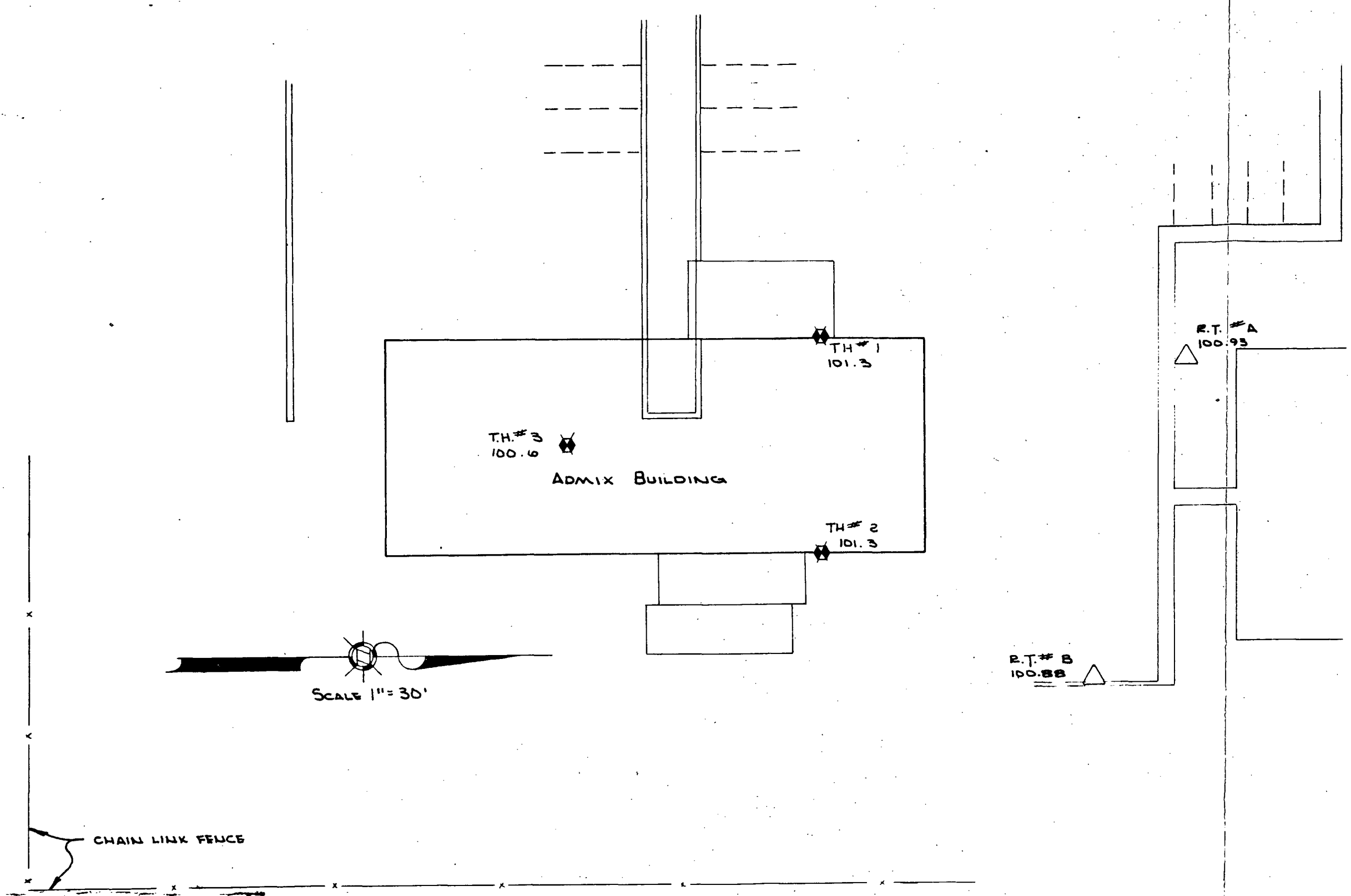
Compaction of slab subgrade and perimeter footing or grade beam backfill should be at least 95% of the maximum density as determined by ASTM D-1557, Method "A". Pressured plumbing placed below slabs on grade should be avoided where possible or should be installed in a pipe chase or water tight sleeve to insure the timely detection of leaks and reduce the possibility of saturating and subgrade strata. Gravity plumbing should be pressure tested where tested where placed below grade for similar reasons.

Exterior site grading should insure rapid run-off of surface waters. Down spouts, parking lot drainage, outside wash rack areas and other concentrations of

surface run-off should be avoided on the north sides of structures and should be extended away from all structures in suitably sized culverts or paved drainage ditches.

Street and parking lot construction should include recompaction of loosely consolidated fills prior to paving if "proof rolling" with a 50 ton roller indicates a lack of stability. The embankment areas should be compacted to 90% of the maximum density as determined by ASTM 698, Method "A" to within 12" of finished subgrade. Compaction for the remaining 12" of the embankment should meet 90% of ASTM D-1557, Method "A". The upper 6" of cut sections should also be compacted to a density of 90% of ASTM D-1557, Method "A". A minimum of 6" of dense graded aggregate base course should be placed over the compacted subgrade. The base course should be compacted to a density of 95% of ASTM D-1557, Method "B". A bituminous prime coat (MC70) may then be placed over the compacted base course at a rate not to exceed 0.15 gallons per square yard. Plant mixed asphaltic concrete paving should be placed to a depth of 3" over the prepared base.

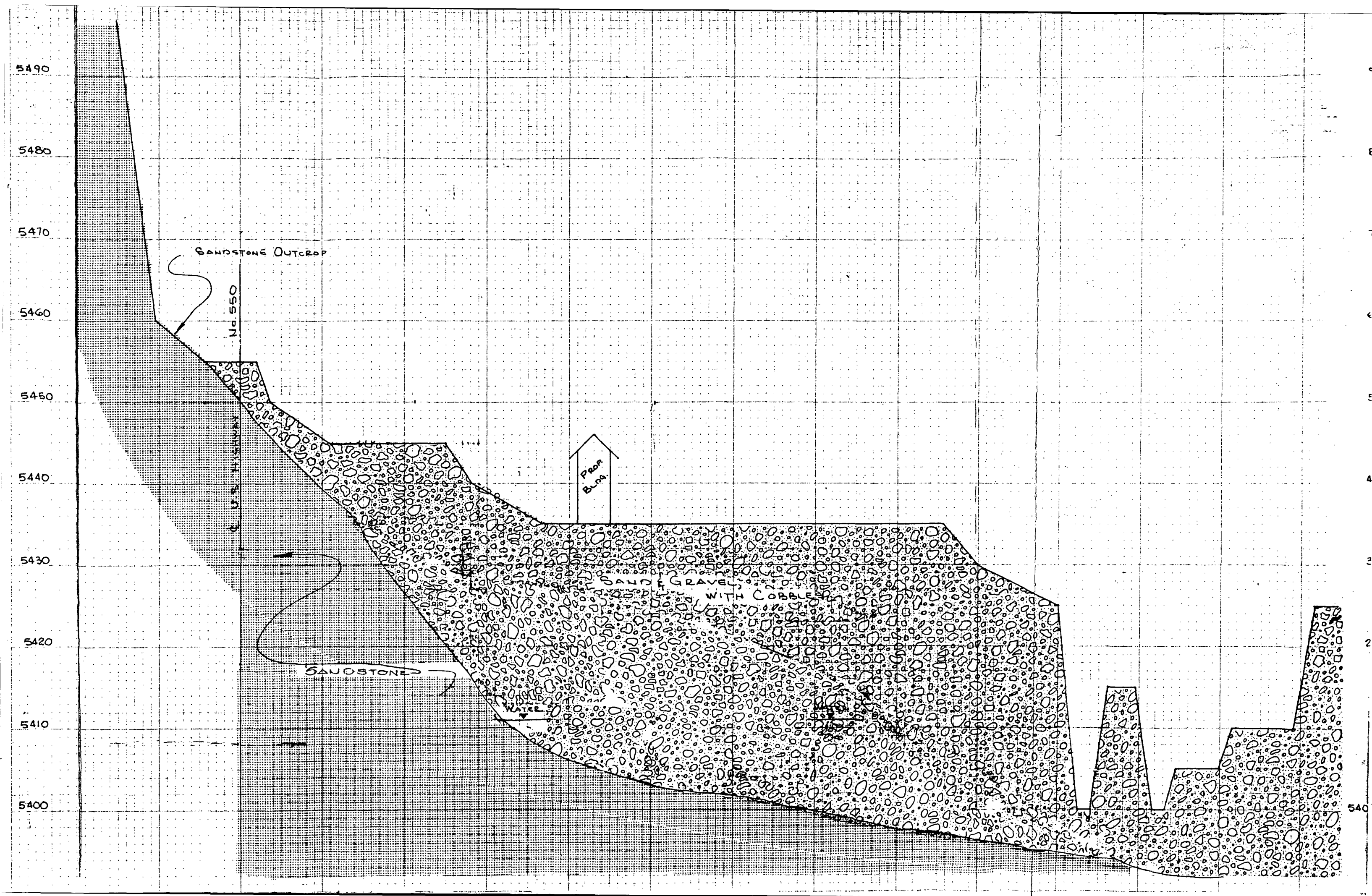
The chemical analysis of the soils at the site indicate that Type II Air Entrained cement will provide adequate protection for all exposed concrete from the moderate sulfate content.



SAU JUAN TESTING LAB INC.
909 WEST APACHE
FARMINGTON NEW MEXICO

TEST HOLE & RESISTIVITY TEST LOCATION MAP
FOR
HALLIBURTON SERVICES
FARMINGTON NEW MEXICO
MARCH 11, 1975

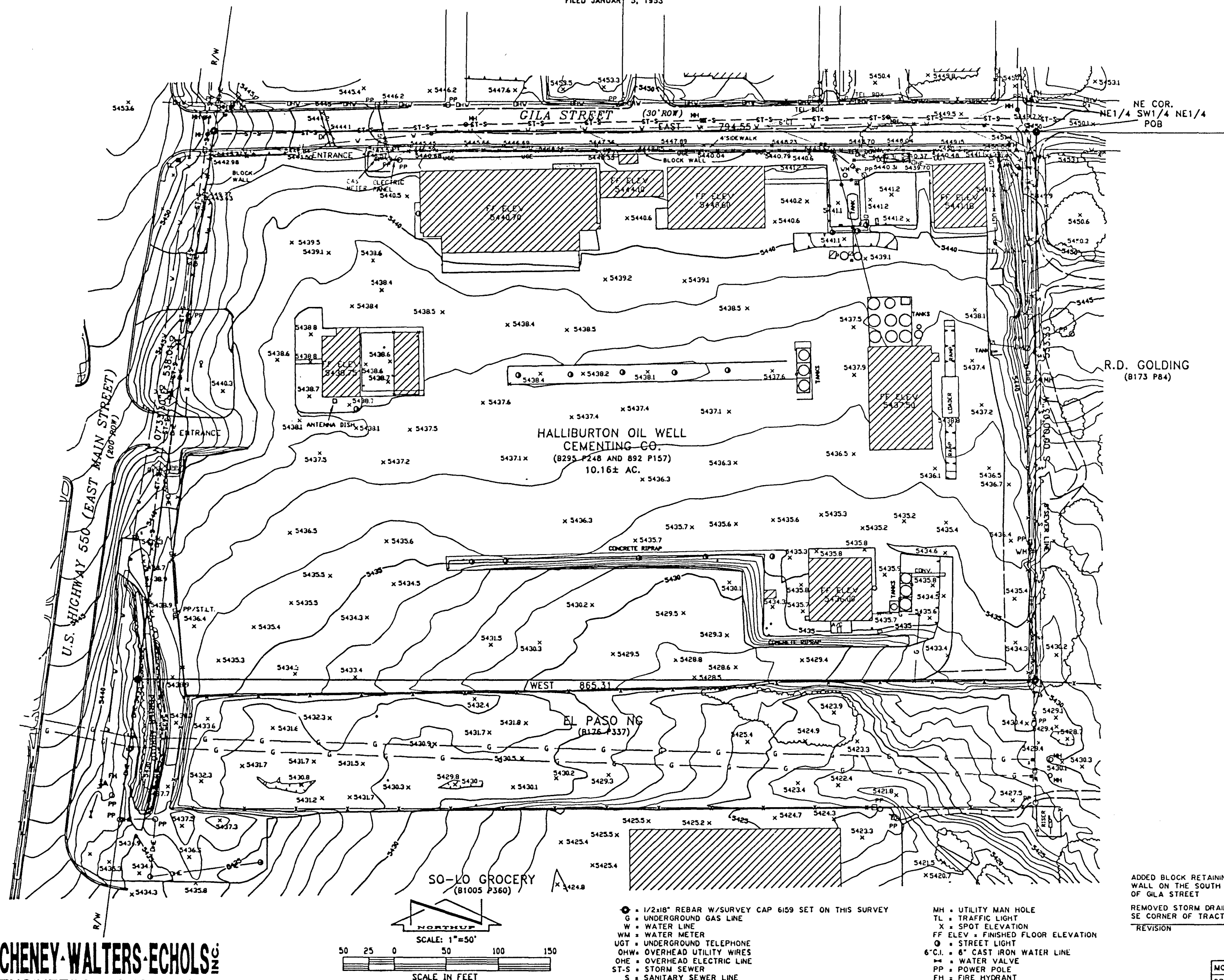
PLATE A



A SURVEY FOR
HALLIBURTON OIL WELL CEMENTING CO.

LYING IN THE NE1/4 SW1/4 NE1/4 OF SECTION 1,
T29N R13W, N.M.P.M., FARMINGTON, SAN JUAN COUNTY,
NEW MEXICO

ILES SUBDIVISION
FILED JANUARY 5, 1953



LAND DESCRIPTION

A tract of land lying in the Northeast Quarter of the Southwest Quarter of the Northeast Quarter (NE1/4 SW1/4 NE1/4) of Section 1, T29N R13W, N.M.P.M., in Farmington, San Juan County, New Mexico, more particularly described as follows:

COMMENCING at the Northeast Corner of said NE1/4 SW1/4 NE1/4, the True Point of Beginning;

THENCE: S00°00'03"W and along the east line of said NE1/4 SW1/4 NE1/4 for a distance of 533.33 feet;
THENCE: WEST for a distance of 865.31 feet to the east right-of-way line of U.S. Highway 550;
THENCE: N07°33'30"E and along said east right-of-way line for a distance of 538.01 feet to a point on the north line of said NE1/4 SW1/4 NE1/4, also said point being on the south line of Gila Street;
THENCE: LEAVING said U.S. Highway 550 right-of-way line and EAST and along the south line of Gila Street and the north line of said NE1/4 SW1/4 NE1/4 for a distance of 794.55 feet and back to the true point of beginning. Said tract contains 10.16 acres, more or less, and is subject to any and all easements of record or in existence.

R.D. GOLDING
(B173 P84)

ADDED BLOCK RETAINING
WALL ON THE SOUTH LINE
OF GILA STREET
REMOVED STORM DRAIN NEAR
SE CORNER OF TRACT 1-23-97
REVISION DATE 9-23-97

I, GEORGE T. WALTERS, A REGISTERED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE IN WHICH THIS SURVEY WAS PERFORMED, HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT NO ENCROACHMENTS EXIST EXCEPT AS NOTED ABOVE, AND THAT ALL IMPROVEMENTS ARE SHOWN IN THEIR CORRECT LOCATION TO RECORD BOUNDARIES AS LOCATED BY THIS SURVEY.

GEORGE T. WALTERS
PROFESSIONAL SURVEYOR NO. 8122
STATE OF NEW MEXICO



MORTGAGE PLAT? NO	PROPERTY SURVEY? YES	MONUMENTS SET? YES
DRAWN BY: DON	PARTY CHIEF: GRT	APPROVED: GTW
DATE: 09-23-97	DATE OF FIELD SURVEY: 9-22-97	DEED: GUARDIAN
BASIS OF BEARING: HIGHWAY 550	PROJECT NO: 94537	FILE: 4537

CHENEY-WALTERS-ECHOLS
ENGINEERS • SURVEYORS

909 W. APACHE • FARMINGTON, NEW MEXICO 87401 • (505)327-3303

ATTACHMENT IX

RADIOACTIVE SURVEY

HALLIBURTON ENERGY SERVICES

NUCLEAR PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/date/#: Farmington, N.M. / 8-21-96 / BTG
 Sample form: Soil, taken by: RSO, report to: RSO
 Data start date: 9/24/96, hour: 15:28, Count time: 50,000 s.
 Weight: 903 g. X 500 ml M.B. or point source @ SDD: cm.
 HPGe γ -ray det. # 2. Group # 1, Tag/file # FARM BTG

Isotope	MDC ^a (pci g ⁻¹)	Meas. ^b (pci g ⁻¹)	Remarks
⁴⁰ K	7.0E-2	1.9 \ -1	
⁴⁶ Sc	6.4E-3		
^{110m} Ag	5.4E-3		
¹³¹ I	4.7E-3		
¹³⁷ Cs	6.1E-3	1.0 \ -1	
¹⁹² Ir	4.8E-3		
²⁴¹ Am	1.5E-3		
²³²Th series			
²²⁸ Ac	1.9E-2	6.9 \ -1	
²²⁸ Th	2.9E-1	1.0	
²²⁴ Ra	9.4E-2	2.7 \ -1	
²¹² Pb	9.3E-3	8.6 \ -1	
²¹² Bi	7.6E-2	8.3 \ -1	
²⁰⁸ Tl	4.9E-3	2.3 \ -1	
²³⁸U series			
²³⁴ Th	1.1E-1	4.8 \ -1	
²³⁴ Pa	1.9E-2		
²²⁶ Ra	1.2E-1	1.3	
²¹⁴ Pb	1.1E-2	7.4 \ -1	
²¹⁴ Bi	1.1E-2	7.4 \ -1	
²¹⁰ Tl	4.5E-3		
²¹⁰ Pb	1.2E-1	4.6 \ -1	
²³⁵U series			
²³⁵ U	8.6E-3		
²³¹ Pa	1.6E-1		
²²⁷ Th	4.5E-2		
²²³ Fr	1.5E-1		
²²³ Ra	2.9E-2		
²¹⁹ Rn	3.7E-2		
²¹¹ Pb	1.2E-1		
²¹¹ Bi	2.9E-2		

Comments: _____

^aMin. det. conc. above det. bkg. @ 95% c.l. for spec. parameters.
^bMeasured conc. above det. bkg.

R. J. Buchanan 10-14-96
 Ron J. Buchanan, Ph.D., CHP
 DTC (405) 251-4444

HALLIBURTON ENERGY SERVICES

NUCLEAR PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/date/#: Farmington, NM / 8-21-96 / wash rock
 Sample form: Soil, taken by: RSO, report to: RSO
 Data start date: 9/25/96, hour: 08:16, Count time: 50,000 s.
 Weight: 814 g. X 500 ml M.B. or point source @ SDD: cm.
 HPGe γ -ray det. # 2. Group # 1, Tag/file # FARMWR

Isotope	MDC ^a (pci g ⁻¹)	Meas. ^b (pci g ⁻¹)	Remarks
⁴⁰ K	7.0E-2	1.4 \ -1	
⁴⁶ Sc	6.4E-3		
^{110m} Ag	5.4E-3		
¹³¹ I	4.7E-3		
¹³⁷ Cs	6.1E-3	3.1 \ -2	
¹⁹² Ir	4.8E-3		
²⁴¹ Am	1.5E-3		
²³²Th series			
²²⁸ Ac	1.9E-2	8.2 \ -1	
²²⁸ Th	2.9E-1	9.7 \ -1	
²²⁴ Ra	9.4E-2	3.2 \ -1	
²¹² Pb	9.3E-3	1.0	
²¹² Bi	7.6E-2	9.9 \ -1	
²⁰⁸ Tl	4.9E-3	2.8 \ -1	
²³⁸U series			
²³⁴ Th	1.1E-1	5.7 \ -1	
²³⁴ Pa	1.9E-2		
²²⁶ Ra	1.2E-1	1.3	
²¹⁴ Pb	1.1E-2	7.8 \ -1	
²¹⁴ Bi	1.1E-2	7.7 \ -1	
²¹⁰ Tl	4.5E-3		
²¹⁰ Pb	1.2E-1	5.1 \ -1	
²³⁵U series			
²³⁵ U	8.6E-3		
²³¹ Pa	1.6E-1		
²²⁷ Th	4.5E-2		
²²³ Fr	1.5E-1		
²²³ Ra	2.9E-2		
²¹⁹ Rn	3.7E-2		
²¹¹ Pb	1.2E-1		
²¹¹ Bi	2.9E-2		

Comments: _____

^aMin. det. conc. above det. bkg. @ 95% c.l. for spec. parameters.
^bMeasured conc. above det. bkg.

R. J. Buchanan 10-14-96
 Ron J. Buchanan, Ph.D., CHP
 DTC (405) 251-4444



Halliburton Company
ENERGY SERVICES GROUP

OIL CONSERVATION DIVISION
RECEIVED

OCT 14 PM 9 28

REGULATORY AFFAIRS DEPARTMENT

Writer's Direct Dial Number: (405) 251-3042

October 12, 1992

Certified P 084 533 981
Return Receipt Requested

State of New Mexico
Energy, Minerals and Natural
Resources Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

ATTN: Mr. William LeMay, Director

Dear Mr. LeMay,

Enclosed please find the original discharge plan application for the Halliburton Services Farmington facility and two copies in accordance with paragraph 3 of your letter of February 21, 1992. Also included is Halliburton check 15096975 for the filing fee. A time extension request was sent to your attention on July 16, 1992. If you need further information or if there are any questions, please call me at the letterhead number.

Very Truly Yours,

HARRY MESSENHEIMER
Environmental Engineer

Enclosures: 1. Topographic Map, Farmington, NM
 2. Plot plan Halliburton, Farmington Facility
 3. Part VI form including MSD's
 4. Part VII form
 5. Part VIII Form
 6. SPCC Plan Halliburton, Farmington

xc: C. Lane
 Hugh Hanson
 David King
 File

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87501

DISCHARGE PLAN APPLICATION FOR OILFIELD SERVICE FACILITIES

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

- I. **TYPE:** Oil Field Service Facility
- II. **OPERATOR:** Halliburton Services
ADDRESS: P.O. Drawer 960 Farmington, NM 87499
CONTACT PERSON: David King **PHONE:** 505 325-3575
- III. **LOCATION:** - /4 - /4 Section - Township - Range -
Enclosure 1 Submit large scale topographic map showing exact location.
UTM Zone 12, 745,9E, 407.21N.
- IV. **Attach the name and address of the landowner of the facility site.**
Halliburton Company, Energy Services Group, 2700 Post Oak Blvd. Houston, TX
- V. **Attach a description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.** Enclosure 2
- VI. **Attach a description of all materials stored or used at the facility.**
Enclosure 3, Part VI form Including MSD'S
- VII. **Attach a description of present sources and quantites of effluent and waste solids.**
Enclosure 4, Part VII Form
- VIII. **Attach a description of current liquid and solid waste collection/treatment/disposal procedures.**
Enclosure 5, Part VII Form
- IX. **Attach a description of proposed modifications to existing collection/treatment/disposal systems.**
Not Applicable
- X. **Attach a routine inspection, maintenance plan and reporting to ensure permit compliance.**
Not Applicable
- XI. **Attach a contingency plan for reporting and clean-up of spills or releases.**
Enclosure 6
- XII. **Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact fresh water.** No oilfield waste is disposed of on this site.
- XIII. **Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.**
- XIV. **CERTIFICATION**

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

Name: Harry Messenheimer

Title: Environmental Engineer

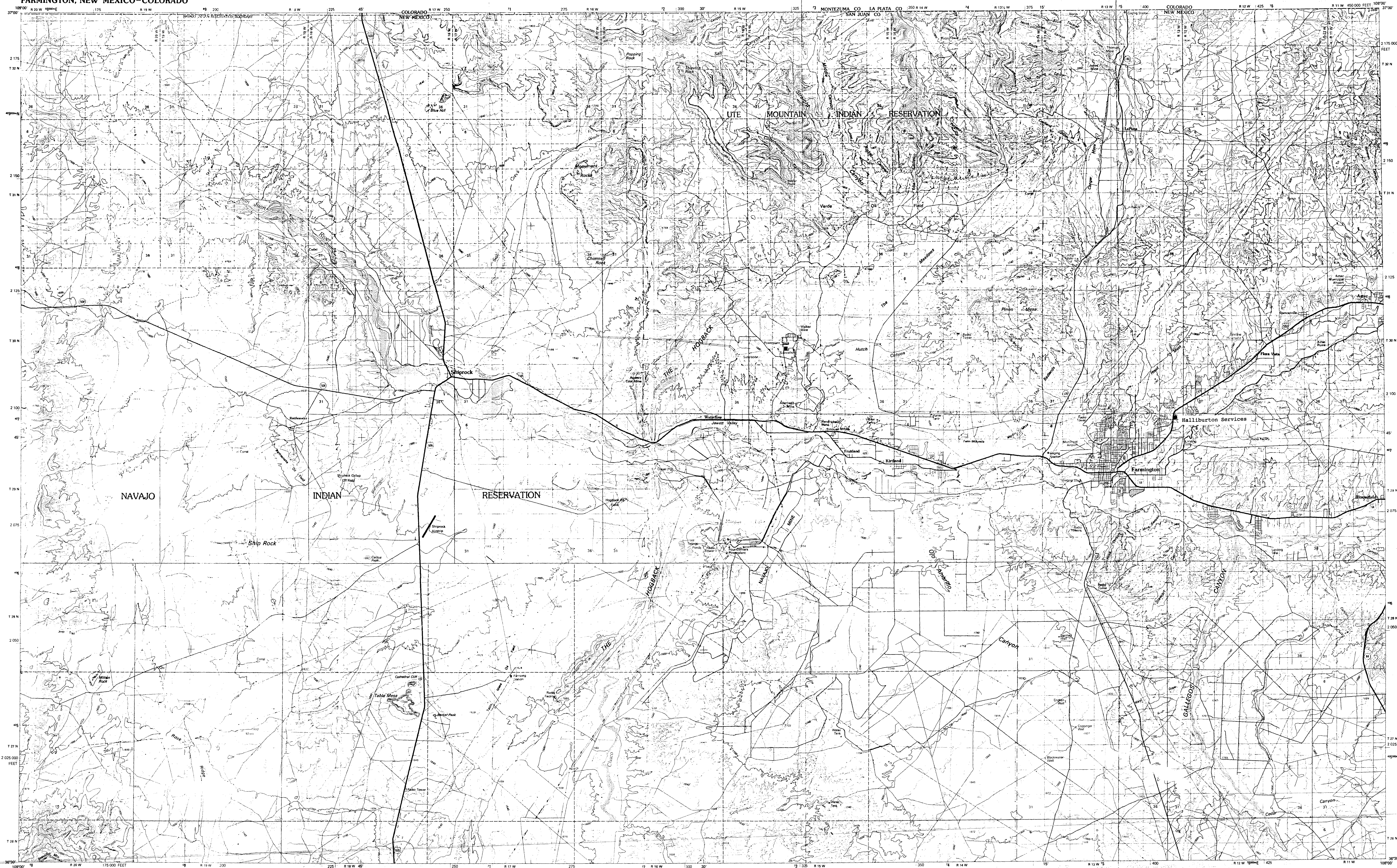
Signature: Harry Messenheimer

Date: October 12, 1992

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.

FARMINGTON, NEW MEXICO-COLORADO

30 X 60 MINUTE SERIES (TOPOGRAPHIC)



1:100 000-scale metric
topographic map of
Farmington
NEW MEXICO-COLORADO



30 X 60 MINUTE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

GEOLOGICAL SURVEY

1980

Produced by the United States Geological Survey
Compiled from USGS 1:24 000- and 1:62 500-scale topographic maps dated 1934-1966. Planimetry revised from aerial photographs taken 1977 and other source data. Revised information not field checked. Map edited 1980
Projection and 10 000-meter grid, zone 12: Universal Transverse Mercator
25 000-foot grid ticks based on New Mexico coordinate system, west zone
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 2 meters north and 57 meters east
There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 20 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	Diagram showing magnetic declination for the year 1980. The diagram is a circle with a vertical line and a horizontal line, with angles marked.		1	2	3
1	3.2808			4	5	6
2	6.5617	To convert meter to feet multiply by 3.2808 To convert feet to meters multiply by 0.3048		7	8	9
3	9.8425			10	11	12
4	13.1234			13	14	15
5	16.4042			16	17	18
6	19.6850			19	20	21
7	22.9658			22	23	24
8	26.2466			25	26	27
9	29.5273			28	29	30
10	32.8081			31	32	33

FOR SALE BY U. S. GEOLOGICAL SURVEY,
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

Enclosure 1
Topographic Map Symbols

Primary highway, hard surface	Secondary highway, hard surface	Light duty road, principal street, hard or improved surface	Other road or street, trail	Route marker, Interstate, U. S. State	Railroad: standard gage, narrow gage	Bridge: overpass, underpass	Turned road, railroad	Built up area, locality, elevation	Airport, landing field, landing strip	National boundary	State boundary	County boundary	National or State reservation boundary	Land grant boundary	U. S. public lands survey: range, township, section	Range: township, section line, proposed	Power transmission line: pipeline	Dam: dam with lock	Cemetery: building	Windmill: water well: spring	Mine shaft: adit or cave: mine, quarry: gravel pit	Campground: picnic area; U. S. location monument	Ruin, cliff dwelling	Colored surface: strip mine, lava, sand	Contours: index, intermediate, supplementary	Bathymetric contours: index, intermediate	Stream, lake: perennial, intermittent	Rapids, large and small; falls, large and small	Area to be submerged, marsh, swamp	Land subject to controlled inundation; woodland	Scrub: mangrove	Orchard: vineyard
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A pamphlet describing topographic maps is available on request

FARMINGTON, NEW MEXICO-COLORADO
N3630-W10800/30x60
1980

SCALE 1"=40'	DRWN. BY JAM	DATE 4-14-81
CHECKED BY		DATE
REVISION NO. PAVING SIDEWK.	BY PMH	DATE 6/17/81

PLOT PLAN

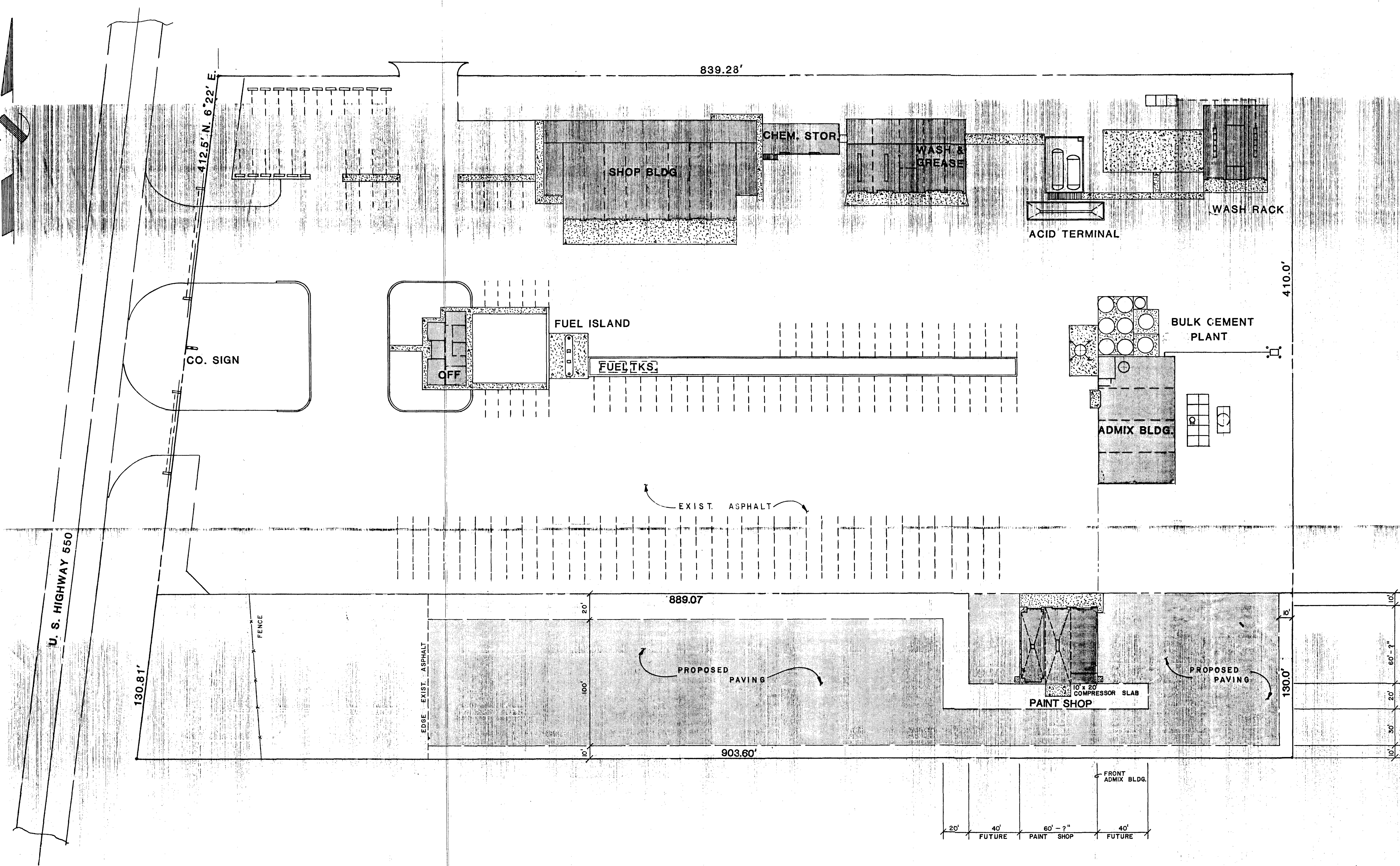
FARMINGTON, NEW MEXICO



INDEX
FN 002
FACILITY
001-20330
LOCATION

SHEET NO.
/ OF /

Enclosure 2



Oilfield Service Facilities

Part VI. Form (Optional)

Materials Stored or Used at the Facility - For each category of material listed below provide information on the general composition of the material or specific information (including brand names if requested), whether a solid or liquid, type of container, estimated volume stored and location. Submit MSD information for chemicals as requested. Use of this form is optional, but the information requested must be provided.

Name	General Makeup or Specific Brand Name (if requested)	Solids(S) or Liquids(L)?	Type of Container (tank drum, etc.)	Estimated Volume Stored	Location (yard, shop, drum storage, etc.)
1. Drilling Fluids (include general makeup & types special additives [e.g. oil, chrome, etc.]	Not Applicable				
2. Brines - (KCl, NaCl, etc.)	Not Applicable				
3. Acids/Caustics (Provide names & MSD sheets)	Hydrochloric Acid	Liquid	Tank	13,000 gal	Acid Plant
4. Detergents/Soaps	Howco Suds	Liquid	Drum	165 gal	Drum Area
5. Solvents & Degreasers (Provide names & MSD sheets)	Safety Kleen	Liquid	Drum	20 gal	Shop, Grease Room
6. Paraffin Treatment/ Emulsion Breakers (Provide names & MSD sheets)	Lo Surf	300 Liquid	Drum	275 gal	Drum Storage Area
	Parachek	160 Liquid	Drum	163 gal	
7. Biocides (Provide names & MSD sheets)	BE-5	Solid	Can	200 lbs	Warehouse
8. Others - (Include other liquids & solids, e.g. cement etc.)	Poz Mix A	Solid		142,000 lbs	Bulk Cement &
	Cement	"		279,000 lbs	Sand Plant
	Gilsonite	"	Tank	80,000 lbs	
	Sand	"		842,000 lbs	
	Gel	"		107,000 lbs	

MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 10-09-92
REVISED DATE 12-24-91

EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: PARACHEK(R) 160 PARAFFIN INHIBITOR PART NUMBER: 516000790
PKG QTY: 55 GALLON DRUM APPLICATION: PARAFFIN SOLVENT
SERVICE USED: CHEMICAL SERVICES

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT+ + + + + + + + +	PERCENT	TLV	PEL
TOLUENE	1-10 %	100 PPM	100 PPM
HEAVY AROMATIC NAPHTHA	> 60 %	300 PPM	400 PPM
NAPHTHALENE	1-10 %	10 PPM	10 PPM

***** SECTION III - PHYSICAL DATA *****

PROPERTY

MEASUREMENT

APPEARANCE	CLEAR AMBER LIQUID
ODOR	AROMATIC
SPECIFIC GRAVITY (H2O=1)	.890
BULK DENSITY	7.41 LB/GAL
PH	NOT DETERMINED
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	INSOLUBLE
BIODEGRADABILITY	SLOWLY
PERCENT VOLATILES	N/D
EVAPORATION RATE(BUTYL ACETATE=1)	0.1
VAPOR DENSITY	5
VAPOR PRESSURE (MMHG)	55.00
BOILING POINT(760 MMHG)	300 F / 148 C
POUR POINT	8 F / - 13 C
FREEZE POINT	N/D
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

NFPA(704) RATING:

HEALTH 2	FLAMMABILITY 2	REACTIVITY 0	SPECIAL NONE
FLASH POINT	128 F /	53 C	FLASH MTHD SETA
AUTOIGNITION TEMPERATURE	ND F /	ND C	
FLAMMABLE LIMITS (% BY VOLUME)	LOWER 0.8	UPPER 7.1	

EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

DO NOT SPRAY POOL FIRES DIRECTLY. A SOLID STREAM OF WATER DIRECTED INTO

HOT BURNING LIQUID CAN CAUSE SPLATTERING.

SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO COOL FIRE-EXPOSED SURFACES.

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

PN: 516000790

PAGE 2

MAY BE IGNITED BY HEAT, SPARKS, OR FLAMES. FIGHT FIRE FROM A SAFE DISTANCE AND FROM A PROTECTED LOCATION. HEAT MAY BUILD PRESSURE AND RUPTURE CLOSED CONTAINERS, SPREADING THE FIRE AND INCREASING THE RISK OF BURNS AND INJURIES.

INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE AND CARBON MONOXIDE.

* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: NOT DETERMINED

PRODUCT TLV: 50 PPM TOTAL HYDROCARBONS

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE EYE IRRITATION.

SKIN:

FREQUENT OR PROLONGED CONTACT WILL DRY AND DEFAT THE SKIN, POSSIBLY LEADING TO IRRITATION AND DERMATITIS. REPEATED CONTACT MAY SENSITIZE THE SKIN. MAY CAUSE PHOTOSENSITIZATION EVIDENCED BY REPEATED OCCURRENCE OF DERMATITIS RASH ON EXPOSURE TO SUNLIGHT.

INHALATION:

HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. THIS MAY BE EVIDENCED BY GIDDINESS, HEADACHES, DIZZINESS, NAUSEA, VOMITING OR POSSIBLY UNCONSCIOUSNESS.

HIGH CONCENTRATION MAY HAVE AN ANESTHETIC EFFECT.

VAPORS, MIST OR SPRAY MAY CAUSE IRRITATION.

INGESTION:

NO DATA AVAILABLE

CHRONIC EFFECTS:

CHRONIC OVEREXPOSURE MAY CAUSE LIVER AND KIDNEY DISORDERS.

THIS PRODUCT CONTAINS SIGNIFICANT AMOUNTS OF POLYNUCLEAR AROMATIC HYDROCARBONS (PNA). CERTAIN PNAS HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN LABORATORY ANIMALS AND MAY ALSO CAUSE CANCER OF THE LUNGS AND OTHER SITES. IN VIEW OF THESE FINDINGS, GOOD PERSONAL HYGIENE IS CRITICAL.

BENZO(A)PYRENE (BAP) AND SOME OTHER PNAS ARE LISTED AS CARCINOGENS OR POTENTIAL CARCINOGENS BY THE U.S. NATIONAL TOXICOLOGY PROGRAM. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CONCLUDED THAT BAP AND SOME OTHER PNAS ARE PROBABLY CARCINOGENIC TO HUMANS.

LIMITED STUDIES ON OILS THAT ARE VERY ACTIVE CARCINOGENS HAVE SHOWN THAT WASHING THE ANIMAL'S WITH SOAP AND WATER BETWEEN APPLICATIONS GREATLY

REDUCES TUMOR FORMATION. THESE STUDIES DEMONSTRATE THE EFFECTIVENESS OF
CLEANSING THE SKIN AFTER CONTACT.
THIS COMPONENT CONTAINS A SIGNIFICANT LEVEL OF POLYNUCLEAR AROMATIC
HYDROCARBONS (PNA'S) BETWEEN 0.4 % AND 0.5 %. WHEN AEROSOLS ARE LIKELY TO BE
GENERATED OR WHEN PRODUCT TEMPERATURES EXCEED 300 DEG. C., AIR SAMPLES
SHOULD BE MONITORED FOR PNA'S.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN
EXISTING DERMATITIS.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK
PROMPT MEDICAL ATTENTION.

PN: 516000790

PAGE 3

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE
REMOVING CONTAMINATED CLOTHING AND SHOES, USE SOAP IF AVAILABLE. SEEK
MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION,
PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! GIVE UP TO TWO (2) QUARTS OF WATER TO DILUTE.
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL
ATTENTION.

* * * * * SECTION VI - REACTIVITY DATA * * * * *

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. ISOLATE SPILL AREA AND STOP LEAK WHERE SAFE.
REMOVE IGNITION SOURCES. CONTAIN AND ABSORB SPILL WITH SAND OR OTHER INERT
MATERIAL. SCOOP OR SWEEP UP USING NON-SPARKING TOOLS. IN ENCLOSED AREAS,
WEAR SELF-CONTAINED BREATHING APPARATUS.

WASTE DISPOSAL METHOD:

CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL.

GET APPROVAL FROM HAZARDOUS WASTE DISPOSAL SITE AUTHORIZED UNDER EPA-RCRA
SUBTITLE C OR STATE EQUIVALENT. SHIP TO SITE.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ORGANIC VAPOR CARTRIDGE RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION SHOULD BE USED IN AREAS WITHOUT GOOD CROSS VENTILATION. LOCAL EXHAUST VENTILATION MUST BE DESIGNED FOR EXPLOSIVE ATMOSPHERES (NEC CLASS I EQUIPMENT).

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

GOGGLES AND/OR FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON TO PREVENT DIRECT SKIN CONTACT.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING PARACHEK(R) 160 PARAFFIN INHIBITOR 516.000790

WARNING!

MAY CAUSE HEADACHE, DIZZINESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS.

MAY CAUSE EYE AND SKIN IRRITATION.

MAY CAUSE CONTACT DERMATITIS IN SENSITIVE INDIVIDUALS.

COMBUSTIBLE!

PN: 516000790

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FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

KEEP FROM HEAT, SPARKS, AND OPEN FLAME.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

IF EMPTY CONTAINER RETAINS PRODUCT RESIDUES, ALL LABEL PRECAUTIONS MUST BE OBSERVED. STORE AWAY FROM IGNITION SOURCES WITH ALL DRUM CLOSURES IN PLACE. OFFER CONTAINER TO RECONDITIONER OR RECYCLER. ENSURE RECONDITIONER OR RECYCLER IS AWARE OF THE PROPERTIES OF THE CONTENTS.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:

NOT RESTRICTED

IATA SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS TOLUENE)-3-UN1993 (53 C)-III

IMO SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS TOLUENE)-3.3 FLAMMABLE LIQUID-UN1993 (53 C)-IMO PAGE 3345

CAN SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS TOLUENES)-3.3-PIN1993-III

ADR SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS-(CONTAINS TOLUENE)-3, 31, (C)-ADR

* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: Y PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y

CHRONIC (DELAYED): Y MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPI QUANTITY)
6,740 GALS. - TOLUENE, U220

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

COMPONENT NAME	CAS-REG-NO	PCT
TOLUENE	108-88-3	1-10 %
NAPHTHALENE	91-20-3	1-10 %

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES	CEPA NE	EEC YES	ACORN YES	NPR NE	DRSM NE
----------	---------	---------	-----------	--------	---------

F. EXTRACTION METAL AND TRACE CONTENTS

ARSENIC:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NOT EVALUATED
BARIUM :	IN LIQUID > 100 MG/L,	SOLID > 10000 MG/KG	NOT EVALUATED
CADIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NOT EVALUATED
CHROMIUM(VI):	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NOT EVALUATED
CHROMIUM(III):	IN LIQUID > 560 MG/L,	SOLID > 2500 MG/KG	NOT EVALUATED
LEAD:	IN LIQUID > 5 MG/L,	SOLID > 1000 MG/KG	NOT EVALUATED
MERCURY:	IN LIQUID > 0.2 MG/L,	SOLID > 2000 MG/KG	NOT EVALUATED
SELENIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NOT EVALUATED
SILVER:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NOT EVALUATED
ANTIMONY:	IN LIQUID > 15 MG/L,	SOLID > 500 MG/KG	NOT EVALUATED
BERYLLIUM:	IN LIQUID > 0.75 MG/L,	SOLID > 75 MG/KG	NOT EVALUATED

PN: 516000790

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COBALT:	IN LIQUID > 80 MG/L,	SOLID > 8000 MG/KG	NOT EVALUATED
COPPER:	IN LIQUID > 25 MG/L,	SOLID > 2500 MG/KG	NOT EVALUATED
FLUORIDE:	IN LIQUID > 180 MG/L,	SOLID > 18000 MG/KG	NOT EVALUATED
MOLYBDENUM:	IN LIQUID > 350 MG/L,	SOLID > 3500 MG/KG	NOT EVALUATED
NICKEL:	IN LIQUID > 20 MG/L,	SOLID > 2000 MG/KG	NOT EVALUATED
THALLIUM:	IN LIQUID > 7 MG/L,	SOLID > 700 MG/KG	NOT EVALUATED
VANADIUM:	IN LIQUID > 24 MG/L,	SOLID > 2400 MG/KG	NOT EVALUATED
ZINC:	IN LIQUID > 250 MG/L,	SOLID > 5000 MG/KG	NOT EVALUATED
CYANIDE:	IN LIQUID > 250 MG/L,	SOLID > 250 MG/KG	NOT EVALUATED
H2S:	IN LIQUID > 500 MG/L,	SOLID > 500 MG/KG	NOT EVALUATED
ORGANO-TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
ORGANO-PHOS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
PERSISTENT ORGANO- HALOGENS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED

G. OTHER COMPONENTS

CONTAINS BENZENE	NO		
CONTAINS TOLUENE	YES	5.000	PCT
CONTAINS XYLENE	NO		
REPORTABLE SPILL QUANTITY FOR BENZENE, TOLUENE, XYLENE	YES	6,740	GAL

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES MEET THE CRITERIA OF A HAZARDOUS WASTE BECAUSE OF:

IGNITABILITY

* * * * *

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. REGULATORY AFFAIRS DEPARTMENT, HALLIBURTON ENERGY SERVICES GROUP

MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536DATE: 10-09-92
REVISED DATE 04-24-90EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

* * * * * SECTION I - PRODUCT DESCRIPTION * * * * *

CHEMICAL CODE: BE-5 MICROBIOCIDE PART NUMBER: 516004930
PKG QTY: 6-6# POLY JARS/BOX APPLICATION: MICROBIOCIDE
SERVICE USED: FRACTURING

* * * * * SECTION II - COMPONENT INFORMATION * * * * *

COMPONENT+ + + + +	PERCENT	TLV	PEL
5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	1-10 %	0.1 MG/M3	NOT EST
2-METHYL-4-ISOTHIAZOLIN-3-ONE	1-10 %	NOT EST	NOT EST

* * * * * SECTION III - PHYSICAL DATA * * * * *

PROPERTY MEASUREMENT

APPEARANCE	LIGHT GREEN TO YELLOW SOLID
ODOR	MILD
SPECIFIC GRAVITY (H2O=1)	.670
BULK DENSITY	5.59 LB/CU.FT.
PH	NOT DETERMINED
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	DISPERSES
BIODEGRADABILITY	N/D
PERCENT VOLATILES	N/A
EVAPORATION RATE(BUTYL ACETATE=1)	N/A
VAPOR DENSITY	N/A
VAPOR PRESSURE (MMHG)	N/D
BOILING POINT(760 MMHG)	N/A
POUR POINT	N/A
FREEZE POINT	N/A
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

* * * * * SECTION IV - FIRE AND EXPLOSION DATA * * * * *

NFPA(704) RATING:

HEALTH 3	FLAMMABILITY 1	REACTIVITY 0	SPECIAL NONE
FLASH POINT	NONE		
AUTOIGNITION TEMPERATURE	ND F /	ND C	
FLAMMABLE LIMITS (OZ. PER CU. FT.)	LOWER N/A	UPPER	N/A

+++++
EXTINGUISHING MEDIA:USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.
SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO COOL FIRE-EXPOSED SURFACES.
FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING
APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE TOXIC GASES.

PN: 516004930

PAGE 2

* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: NOT DETERMINED

PRODUCT TLV: NOT ESTABLISHED

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

CONTACT WILL PRODUCE SEVERE IRRITATION OR BURNS AND, IF NOT IMMEDIATELY
REMOVED, MAY LEAD TO PERMANENT EYE DAMAGE.

SKIN:

CONTACT CAUSES SEVERE IRRITATION OR BURNS WITH POSSIBLE IN-DEPTH INJURY.

INHALATION:

MISTS, AEROSOLS OR VERY HIGH VAPOR CONCENTRATIONS WILL PRODUCE INTENSE EYE
NOSE AND RESPIRATORY IRRITATION AND MAY RESULT IN LUNG DAMAGE. PROLONGED
EXPOSURE MAY RESULT IN CHEMICAL PNEUMONITIS AND, IN EXTREME CASES, PULMONARY
EDEMA (FILLING OF THE LUNGS WITH FLUIDS).

INGESTION:

CAUSES SEVERE IRRITATION OR BURNS TO THE MOUTH AND GASTROINTESTINAL TRACT.
IN EXTREME CASES MAY CAUSE KIDNEY AND LIVER DAMAGE.

CHRONIC EFFECTS:

NO SPECIFIC INFORMATION IS AVAILABLE ON THE CHRONIC EFFECTS OF EXPOSURE.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN
EXISTING DERMATITIS. BREATHING OF VAPOR AND/OR MISTS MAY AGGRAVATE ASTHMA
AND INFLAMMATORY OR FIBROTIC PULMONARY DISEASE.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK
PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE
REMOVING CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION. WASH
CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION,
PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! GIVE UP TO TWO (2) QUARTS OF WATER TO DILUTE.
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL

ATTENTION.

* * * * * SECTION VI - REACTIVITY DATA * * * * *

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF SULFUR AND NITROGEN AND HYDROGEN CHLORIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

PN: 516004930

PAGE 3

NOT APPLICABLE.

* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

DIKE AND ABSORB SPILL USING HYPOCHLORITE SOLUTION* IN AN INERT MATERIAL AND TRANSFER TO A SUITABLE CONTAINER. *FORMULATION: 8 LBS. CALCIUM HYPOCHLORITE 5 LBS. SODIUM HYDROXIDE AND 77 LBS. WATER. SODIUM HYDROXIDE MUST BE ADDED TO MAINTAIN ALKALINITY AND PREVENT THE EVOLUTION OF CHLORINE GAS.

WASTE DISPOSAL METHOD:

GET APPROVAL FROM HAZARDOUS WASTE DISPOSAL SITE AUTHORIZED UNDER EPA-RCRA SUBTITLE C OR STATE EQUIVALENT. SHIP TO SITE.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ORGANIC VAPOR CHEMICAL CARTRIDGE RESPIRATOR WITH A DUST-MIST FILTER.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION.

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

WEAR GOGGLES AND/OR FACE SHIELD. PROVIDE EYEWASH AND QUICK DRENCH SYSTEM.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON TO PREVENT DIRECT SKIN CONTACT.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING BE-5 MICROBIOCIDAL

516.004930

DANGER!

MAY CAUSE SEVERE EYE AND SKIN BURNS.

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

LABEL IN ACCORDANCE WITH FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT REQUIREMENTS.

EPA REGISTRATION NUMBER: 5009-39-40153

EPA EST. NUMBER: 35982-TX-1

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

STORE IN A COOL WELL VENTILATED LOCATION.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

TRIPLE RINSE, REUSING WASTE AS PRODUCT. OFFER CONTAINER FOR RECYCLING OR RECONDITIONING, OR PUNCTURE AND DISPOSE OF IN A SANITARY LANDFILL.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:

CORROSIVE SOLID, N.O.S.(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)-CORROSIVE MATERIAL-UN1759

IATA SHIPPING DESCRIPTION:

CORROSIVE SOLID, N.O.S.(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)-8-UN1759-II

IMO SHIPPING DESCRIPTION:

CORROSIVE SOLID, N.O.S.(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)-8 CORROSIVE MATERIAL-UN1759-IMO PAGE 8151

CAN SHIPPING DESCRIPTION:

CORROSIVE SOLID, N.O.S.(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)-8-PIN1759-II

PN: 516004930

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ADR SHIPPING DESCRIPTION:

CORROSIVE SOLID(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)-8, 65, (B)-ADR

* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y
CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
N/A

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)
CHEMICAL CONTAINS NO TOXIC INGREDIENTS

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES CEPA NE EEC YES ACOIN YES NPR NE DRSM NE

F. EXTRACTION METAL AND TRACE CONTENTS

ARSENIC:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
BARIUM :	IN LIQUID > 100 MG/L,	SOLID > 10000 MG/KG	NO
CADIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
CHROMIUM(VI):	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
CHROMIUM(III):	IN LIQUID > 560 MG/L,	SOLID > 2500 MG/KG	NO
LEAD:	IN LIQUID > 5 MG/L,	SOLID > 1000 MG/KG	NO
MERCURY:	IN LIQUID > 0.2 MG/L,	SOLID > 2000 MG/KG	NO
SELENIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
SILVER:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
ANTIMONY:	IN LIQUID > 15 MG/L,	SOLID > 500 MG/KG	NO
BERYLLIUM:	IN LIQUID > 0.75 MG/L,	SOLID > 75 MG/KG	NO
COBALT:	IN LIQUID > 80 MG/L,	SOLID > 8000 MG/KG	NO
COPPER:	IN LIQUID > 25 MG/L,	SOLID > 2500 MG/KG	NO
FLUORIDE:	IN LIQUID > 180 MG/L,	SOLID > 18000 MG/KG	NO

MOLYBDENUM:	IN LIQUID > 350 MG/L,	SOLID > 3500 MG/KG	NO
NICKEL:	IN LIQUID > 20 MG/L,	SOLID > 2000 MG/KG	NO
THALLIUM:	IN LIQUID > 7 MG/L,	SOLID > 700 MG/KG	NO
VANADIUM:	IN LIQUID > 24 MG/L,	SOLID > 2400 MG/KG	NO
ZINC:	IN LIQUID > 250 MG/L,	SOLID > 5000 MG/KG	NO
CYANIDE:	IN LIQUID > 250 MG/L,	SOLID > 250 MG/KG	NO
H2S:	IN LIQUID > 500 MG/L,	SOLID > 500 MG/KG	NO
ORGANO-TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
ORGANO-PHOS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
PERSISTENT ORGANO-			
HALOGENS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED

G. OTHER COMPONENTS

CONTAINS BENZENE	NO
CONTAINS TOLUENE	NO
CONTAINS XYLENE	NO
REPORTABLE SPILL QUANTITY FOR BENZENE, TOLUENE, XYLENE	NOT APPLICABLE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

I. UNITED KINGDOM - DOE (CHEMICAL NOTIFICATION SCHEME)
TOXICITY CATEGORY

NOT EVALUATED

PN: 516004930

PAGE 5

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LOSURF-300 NONIONIC SURFACTANT

PAGE 1

MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 10-09-92
REVISED DATE 07-15-91

EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: LOSURF-300 NONIONIC SURFACTANT PART NUMBER: 516001570
PKG QTY: 53 GALLON APPLICATION: NONEMULSIFIER
SERVICE USED: STIMULATION

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT+ + + + + + + + +	PERCENT	TLV	PEL
HEAVY AROMATIC NAPHTHA	11-30 %	300 PPM	400 PPM
ISOPROPANOL	31-60 %	400 PPM	400 PPM

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
APPEARANCE	CLEAR AMBER LIQUID
ODOR	SOLVENT
SPECIFIC GRAVITY (H2O=1)	.910
BULK DENSITY	7.58 LB/GAL
PH	NOT DETERMINED
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	DISPERSES
BIODEGRADABILITY	N/D
PERCENT VOLATILES	46-50
EVAPORATION RATE(BUTYL ACETATE=1)	N/D
VAPOR DENSITY	N/D
VAPOR PRESSURE (MMHG)	33.00
BOILING POINT(760 MMHG)	N/D
POUR POINT	< - 40 F / < - 40 C
FREEZE POINT	N/D
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

NFPA(704) RATING:

HEALTH 1	FLAMMABILITY 3	REACTIVITY 0	SPECIAL NONE
FLASH POINT	63 F /	17 C	FLASH MTHD PMCC
AUTOIGNITION TEMPERATURE	ND F /	ND C	
FLAMMABLE LIMITS (% BY VOLUME)	LOWER N/D	UPPER N/D	

EXTINGUISHING MEDIA:
USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.
SPECIAL FIRE FIGHTING PROCEDURES:
USE WATER SPRAY TO COOL FIRE-EXPOSED SURFACES.

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
MAY BE IGNITED BY HEAT, SPARKS, OR FLAMES. FIGHT FIRE FROM A SAFE DISTANCE AND FROM A PROTECTED LOCATION. HEAT MAY BUILD PRESSURE AND RUPTURE CLOSED CONTAINERS, SPREADING THE FIRE AND INCREASING THE RISK OF BURNS AND

PN: 516001570

PAGE 2

INJURIES.
INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE AND CARBON MONOXIDE.

* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: AQU TLM96: 3.3-10 PPM(BROWN SHRIMP)

PRODUCT TLV: NOT ESTABLISHED

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE EYE IRRITATION.

SKIN:

FREQUENT OR PROLONGED CONTACT WILL DRY AND DEFAT THE SKIN, POSSIBLY LEADING TO IRRITATION AND DERMATITIS. REPEATED CONTACT MAY SENSITIZE THE SKIN.

INHALATION:

HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. THIS MAY BE EVIDENCED BY GIDDINESS, HEADACHES, DIZZINESS, NAUSEA, VOMITING OR POSSIBLY UNCONSCIOUSNESS.

VAPORS, MIST OR SPRAY MAY CAUSE IRRITATION.

INGESTION:

ASPIRATION INTO LUNGS BY INGESTION OR VOMITING, MAY CAUSE CHEMICAL PNEUMONITIS RESULTING IN EDEMA AND HEMORRAGE AND MAY BE FATAL. SYMPTOMS INCLUDE INCREASED RESPIRATORY RATE AND BLUISH DISCOLORATION OF SKIN. COUGHING AND GAGGING ARE OFTEN NOTED AT THE TIME OF ASPIRATION.

CHRONIC EFFECTS:

CHRONIC OVEREXPOSURE MAY CAUSE LIVER AND KIDNEY DISORDERS.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN EXISTING DERMATITIS. BREATHING OF VAPOR AND/OR MISTS MAY AGGRAVATE ASTHMA AND INFLAMMATORY OR FIBROTIC PULMONARY DISEASE.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION,
PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! ASPIRATION INTO LUNGS DUE TO VOMITING CAN CAUSE
CHEMICAL PNEUMONITIS WHICH CAN BE FATAL. IF VOMITING OCCURS SPONTANEOUSLY,
KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO LUNGS.

* * * * * SECTION VI - REACTIVITY DATA * * * * *

STABILITY: STABLE

CONDITIONS TO AVOID:

HEAT, SPARKS AND OPEN FLAME.

PN: 516001570

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INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. ISOLATE SPILL AREA AND STOP LEAK WHERE SAFE.
REMOVE IGNITION SOURCES. CONTAIN AND ABSORB SPILL WITH SAND OR OTHER INERT
MATERIAL. SCOOP OR SWEEP UP USING NON-SPARKING TOOLS. IN ENCLOSED AREAS,
WEAR SELF-CONTAINED BREATHING APPARATUS.

WASTE DISPOSAL METHOD:

GET APPROVAL FROM HAZARDOUS WASTE DISPOSAL SITE AUTHORIZED UNDER EPA-RCRA
SUBTITLE C OR STATE EQUIVALENT. SHIP TO SITE.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ORGANIC VAPOR CARTRIDGE RESPIRATOR WITH A FULL FACEPIECE.

IN OXYGEN DEFICIENT AREAS OR CONFINED SPACES, POSITIVE PRESSURE SUPPLIED-
AIR RESPIRATOR WITH 5-MINUTE AUXILIARY BOTTLE, OR PRESSURE-DEMAND OR
POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION SHOULD BE
USED IN AREAS WITHOUT GOOD CROSS VENTILATION.
LOCAL EXHAUST VENTILATION MUST BE DESIGNED FOR EXPLOSIVE ATMOSPHERES (NEC
CLASS I EQUIPMENT).

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

GOGGLES AND/OR FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON TO PREVENT DIRECT SKIN CONTACT.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING LOSURF-300 NONIONIC SURFACTANT

516.001570

WARNING!

MAY CAUSE HEADACHE, DIZZINESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS.
MAY CAUSE IRRITATION TO THE EYES, SKIN OR RESPIRATORY SYSTEM.

FLAMMABLE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

KEEP FROM HEAT, SPARKS, AND OPEN FLAME.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

IF EMPTY CONTAINER RETAINS PRODUCT RESIDUES, ALL LABEL PRECAUTIONS MUST BE OBSERVED. STORE AWAY FROM IGNITION SOURCES WITH ALL DRUM CLOSURES IN PLACE. OFFER CONTAINER TO RECONDITIONER OR RECYCLER. ENSURE RECONDITIONER OR RECYCLER IS AWARE OF THE PROPERTIES OF THE CONTENTS.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:

FLAMMABLE LIQUID, N.O.S.(CONTAINS ISOPROPANOL)-FLAMMABLE LIQUID-UN1993

PN: 516001570

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IATA SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS ISOPROPANOL)-3-UN1993 (16 C)-II

IMO SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS ISOPROPANOL)-3.2-FLAMMABLE LIQUID-UN1993 (16 C)-IMO PAGE 3230

CAN SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS, N.O.S.(CONTAINS ISOPROPANOL)-3.2-PIN1993-II

ADR SHIPPING DESCRIPTION:

FLAMMABLE LIQUIDS-(CONTAINS ISOPROPANOL)-3, 3, (B)-ADR

* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: Y PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y
CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
N/A

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

COMPONENT NAME	CAS-REG-NO	PCT
ISOPROPANOL	67-63-0	31-60 %

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES	CEPA NE	EEC YES	ACORN YES	NPR NE	DRSM NE
----------	---------	---------	-----------	--------	---------

F. EXTRACTION METAL AND TRACE CONTENTS

ARSENIC:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
BARIIUM :	IN LIQUID > 100 MG/L,	SOLID > 10000 MG/KG	NO

CADIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
CHROMIUM(VI):	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
CHROMIUM(III):	IN LIQUID > 560 MG/L,	SOLID > 2500 MG/KG	NO
LEAD:	IN LIQUID > 5 MG/L,	SOLID > 1000 MG/KG	NO
MERCURY:	IN LIQUID > 0.2 MG/L,	SOLID > 2000 MG/KG	NO
SELENIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
SILVER:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
ANTIMONY:	IN LIQUID > 15 MG/L,	SOLID > 500 MG/KG	NO
BERYLLIUM:	IN LIQUID > 0.75 MG/L,	SOLID > 75 MG/KG	NO
COBALT:	IN LIQUID > 80 MG/L,	SOLID > 8000 MG/KG	NO
COPPER:	IN LIQUID > 25 MG/L,	SOLID > 2500 MG/KG	NO
FLUORIDE:	IN LIQUID > 180 MG/L,	SOLID > 18000 MG/KG	NO
MOLYBDENUM:	IN LIQUID > 350 MG/L,	SOLID > 3500 MG/KG	NO
NICKEL:	IN LIQUID > 20 MG/L,	SOLID > 2000 MG/KG	NO
THALLIUM:	IN LIQUID > 7 MG/L,	SOLID > 700 MG/KG	NO
VANADIUM:	IN LIQUID > 24 MG/L,	SOLID > 2400 MG/KG	NO
ZINC:	IN LIQUID > 250 MG/L,	SOLID > 5000 MG/KG	NO
CYANIDE:	IN LIQUID > 250 MG/L,	SOLID > 250 MG/KG	NO
H2S:	IN LIQUID > 500 MG/L,	SOLID > 500 MG/KG	NO
ORGANO-TIN:	IN LIQUID OR	SOLID > 100 MG/L	NO
ORGANO-PHOS:	IN LIQUID OR	SOLID > 100 MG/L	NO
TIN:	IN LIQUID OR	SOLID > 100 MG/L	NO
PERSISTENT ORGANO-			
HALOGENS:	IN LIQUID OR	SOLID > 100 MG/L	NO

G. OTHER COMPONENTS
CONTAINS BENZENE

NO

PN: 516001570

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CONTAINS TOLUENE

NO

CONTAINS XYLENE

NO

REPORTABLE SPILL QUANTITY FOR BENZENE, TOLUENE, XYLENE

NOT APPLICABLE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES MEET THE CRITERIA OF A HAZARDOUS
WASTE BECAUSE OF:

IGNITABILITY

I. UNITED KINGDOM - DOE (CHEMICAL NOTIFICATION SCHEME)
TOXICITY CATEGORY

NOT EVALUATED

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND

SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY
PROHIBITED. REGULATORY AFFAIRS DEPARTMENT, HALLIBURTON ENERGY SERVICES GROUP

MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536DATE: 10-09-92
REVISED DATE 02-22-90EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

* * * * * SECTION I - PRODUCT DESCRIPTION * * * * *

CHEMICAL CODE: SAFETY KLEEN
PKG QTY: 55 GAL
SERVICE USED: SHOPSPART NUMBER: NIS798 0
APPLICATION: CLEANING PARTS

* * * * * SECTION II - COMPONENT INFORMATION * * * * *

COMPONENT+ + + + + PERCENT TLV PEL

MINERAL SPIRITS > 60 % 200 PPM NOT EST

* * * * * SECTION III - PHYSICAL DATA * * * * *

PROPERTY

MEASUREMENT

APPEARANCE	CLEAR GREEN LIQUID
ODOR	PETROLEUM HYDROCARBON
SPECIFIC GRAVITY (H2O=1)	.775
BULK DENSITY	6.45 LB/GAL
PH	NOT DETERMINED
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	NEGLIGIBLE
BIODEGRADABILITY	N/D
PERCENT VOLATILES	100
EVAPORATION RATE(BUTYL ACETATE=1)	0.02
VAPOR DENSITY	4.9
VAPOR PRESSURE (MMHG)	2.00
BOILING POINT(760 MMHG)	310 F / 154 C
POUR POINT	N/D
FREEZE POINT	N/D
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

* * * * * SECTION IV - FIRE AND EXPLOSION DATA * * * * *

NFPA(704) RATING:

HEALTH	FLAMMABILITY	REACTIVITY	SPECIAL	NONE
FLASH POINT		105 F /	40 C	FLASH MTHD TCC
AUTOIGNITION TEMPERATURE		ND F /	ND C	
FLAMMABLE LIMITS (% BY VOLUME)	LOWER	0.7	UPPER	6.0

+++++
EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO COOL FIRE-EXPOSED SURFACES.

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING

APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.
UNUSUAL FIRE AND EXPLOSION HAZARDS:

MAY BE IGNITED BY HEAT, SPARKS, OR FLAMES. FIGHT FIRE FROM A SAFE DISTANCE AND FROM A PROTECTED LOCATION. HEAT MAY BUILD PRESSURE AND RUPTURE CLOSED CONTAINERS, SPREADING THE FIRE AND INCREASING THE RISK OF BURNS AND INJURIES.

PN: NIS798 0

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INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE AND CARBON MONOXIDE.

* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: NOT DETERMINED

PRODUCT TLV: NOT ESTABLISHED

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE SEVERE IRRITATION WHICH MAY INJURY TISSUE IF NOT REMOVED PROMPTLY.

SKIN:

CONTACT MAY CAUSE SKIN IRRITATION.

INHALATION:

HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. THIS MAY BE EVIDENCED BY GIDDINESS, HEADACHES, DIZZINESS, NAUSEA, VOMITING OR POSSIBLY UNCONSCIOUSNESS.

INGESTION:

MAY BE FATAL IF SWALLOWED.

ASPIRATION INTO LUNGS BY INGESTION OR VOMITING, MAY CAUSE CHEMICAL PNEUMONITIS RESULTING IN EDEMA AND HEMORRAGE AND MAY BE FATAL. SYMPTOMS INCLUDE INCREASED RESPIRATORY RATE AND BLuish DISCOLORATION OF SKIN. COUGHING AND GAGGING ARE OFTEN NOTED AT THE TIME OF ASPIRATION.

OTHER SYMPTOMS AFFECTED:

A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENER BY EXPOSURE TO THIS PRODUCT.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK PROMPT MEDICAL ATTENTION.

SKIN:

PROMPTLY WASH SKIN WITH SOAP AND WATER.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! ASPIRATION INTO LUNGS DUE TO VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO LUNGS.

STABILITY: STABLE

CONDITIONS TO AVOID:

HEAT, SPARKS AND OPEN FLAME.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

PN: NIS798 0

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* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. ISOLATE SPILL AREA AND STOP LEAK WHERE SAFE.

REMOVE IGNITION SOURCES. CONTAIN AND ABSORB SPILL WITH SAND OR OTHER INERT MATERIAL. SCOOP OR SWEEP UP USING NON-SPARKING TOOLS. IN ENCLOSED AREAS, WEAR SELF-CONTAINED BREATHING APPARATUS.

WASTE DISPOSAL METHOD:

GET APPROVAL FROM HAZARDOUS WASTE DISPOSAL SITE AUTHORIZED UNDER EPA-RCRA SUBTITLE C OR STATE EQUIVALENT. SHIP TO SITE.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ORGANIC VAPOR CARTRIDGE RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION SHOULD BE USED IN AREAS WITHOUT GOOD CROSS VENTILATION.

LOCAL EXHAUST VENTILATION MUST BE DESIGNED FOR COMBUSTIBLE ATMOSPHERES (NEC CLASS II EQUIPMENT).

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

WEAR GOGGLES AND/OR FACE SHIELD. PROVIDE EYEWASH AND QUICK DRENCH SYSTEM.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON TO PREVENT DIRECT SKIN CONTACT.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING SAFETY KLEEN

NIS.798 0

WARNING!

MAY CAUSE HEADACHE, DIZZINESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS.

MAY CAUSE EYE AND SKIN IRRITATION.

COMBUSTIBLE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

KEEP FROM HEAT, SPARKS, AND OPEN FLAME.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

IF EMPTY CONTAINER RETAINS PRODUCT RESIDUES, ALL LABEL PRECAUTIONS MUST BE OBSERVED. STORE AWAY FROM IGNITION SOURCES WITH ALL DRUM CLOSURES IN PLACE. OFFER CONTAINER TO RECONDITIONER OR RECYCLER. ENSURE RECONDITIONER OR RECYCLER IS AWARE OF THE PROPERTIES OF THE CONTENTS.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:
NOT RESTRICTED

IATA SHIPPING DESCRIPTION:
FLAMMABLE LIQUID, N.O.S.(MINERAL SPIRITS)-3-UN1993-III

IMO SHIPPING DESCRIPTION:
FLAMMABLE LIQUID, N.O.S.(CONTAINS MINERAL SPIRITS)-3.3 FLAMMABLE LIQUID-UN1993 (40.6 C)-IMO PAGE 3345

CAN SHIPPING DESCRIPTION:
FLAMMABLE LIQUID, N.O.S.(CONTAINS PETROLEUM SPIRITS)-3.3-PIN1993-III

PN: NIS798 0

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ADR SHIPPING DESCRIPTION:
NO ADR INFORMATION AVAILABLE

* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: Y PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y
CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: PURE

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
NOT EVALUATED

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)
CHEMICAL CONTAINS NO TOXIC INGREDIENTS

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES
TSCA YES CEPA NE EEC YES ACOIN YES NPR NE DRSM NE

F. EXTRACTION METAL AND TRACE CONTENTS

ARSENIC:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
BARIUM :	IN LIQUID > 100 MG/L,	SOLID > 10000 MG/KG	NO
CADIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
CHROMIUM(VI):	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
CHROMIUM(III):	IN LIQUID > 560 MG/L,	SOLID > 2500 MG/KG	NO
LEAD:	IN LIQUID > 5 MG/L,	SOLID > 1000 MG/KG	NO
MERCURY:	IN LIQUID > 0.2 MG/L,	SOLID > 2000 MG/KG	NO
SELENIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
SILVER:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
ANTIMONY:	IN LIQUID > 15 MG/L,	SOLID > 500 MG/KG	NO
BERYLLIUM:	IN LIQUID > 0.75 MG/L,	SOLID > 75 MG/KG	NO
COBALT:	IN LIQUID > 80 MG/L,	SOLID > 8000 MG/KG	NO
COPPER:	IN LIQUID > 25 MG/L,	SOLID > 2500 MG/KG	NO

FLUORIDE:	IN LIQUID > 180 MG/L,	SOLID > 18000 MG/KG	NO
MOLYBDENUM:	IN LIQUID > 350 MG/L,	SOLID > 3500 /KG	NO
NICKEL:	IN LIQUID > 20 MG/L,	SOLID > 2000 MG/KG	NO
THALLIUM:	IN LIQUID > 7 MG/L,	SOLID > 700 MG/KG	NO
VANADIUM:	IN LIQUID > 24 MG/L,	SOLID > 2400 MG/KG	NO
ZINC:	IN LIQUID > 250 MG/L,	SOLID > 5000 MG/KG	NO
CYANIDE:	IN LIQUID > 250 MG/L,	SOLID > 250 MG/KG	NO
H2S:	IN LIQUID > 500 MG/L,	SOLID > 500 MG/KG	NO
ORGANO-TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
ORGANO-PHOS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
PERSISTENT ORGANO-			
HALOGENS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED

G. OTHER COMPONENTS

CONTAINS BENZENE	NO
CONTAINS TOLUENE	NO
CONTAINS XYLENE	NO
REPORTABLE SPILL QUANTITY FOR BENZENE, TOLUENE, XYLENE	NOT APPLICABLE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES MEET THE CRITERIA OF A HAZARDOUS WASTE BECAUSE OF:

IGNITABILITY

PN: NIS798 0

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I. UNITED KINGDOM - DOE (CHEMICAL NOTIFICATION SCHEME)
TOXICITY CATEGORY

NOT EVALUATED

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. REGULATORY AFFAIRS DEPARTMENT, HALLIBURTON ENERGY SERVICES GROUP

HOWCO-SUDS FOAMING AGENT LIQUID

PAGE 1

MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 10-09-92
REVISED DATE 06-07-90

EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: HOWCO-SUDS FOAMING AGENT LIQUID PART NUMBER: 070156020
PKG QTY: 55 GAL STEEL DRUM APPLICATION: SURFACTANT, FOAMING AGENT
SERVICE USED: CHEM. SERV., FRACTURING

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT+ + + + + + + + +	PERCENT	TLV	PEL
AMMONIUM ETHER SULFATE	31-60 %	NOT EST	NOT EST
ETHYLENE GLYCOL MONOBUTYL ETHER	11-30 %	25 PPM S	25 PPM S

***** SECTION III - PHYSICAL DATA *****

PROPERTY

MEASUREMENT

APPEARANCE	CLEAR, AMBER LIQUID
ODOR	SWEET
SPECIFIC GRAVITY (H2O=1)	1.070
BULK DENSITY	8.91 LB/GAL
PH	7.7
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	COMPLETE
BIODEGRADABILITY	SLOWLY
PERCENT VOLATILES	9
EVAPORATION RATE(BUTYL ACETATE=1)	N/D
VAPOR DENSITY	N/D
VAPOR PRESSURE (MMHG)	N/D
BOILING POINT(760 MMHG)	N/D
POUR POINT	- 13 F / - 25 C
FREEZE POINT	N/D
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

NFPA(704) RATING:

HEALTH 1	FLAMMABILITY 1	REACTIVITY 0	SPECIAL NONE
FLASH POINT	157 F /	69 C	FLASH MTHD TCC
AUTOIGNITION TEMPERATURE	ND F /	ND C	
FLAMMABLE LIMITS (% BY VOLUME)	LOWER 1.1	UPPER 12.7	

+++++

EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

USE WATER SPRAY TO COOL FIRE-EXPOSED SURFACES.

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON MONOXIDE AND OXIDES OF NITROGEN AND SULFUR.

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* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: NOT DETERMINED

PRODUCT TLV: NOT ESTABLISHED

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE SEVERE IRRITATION WHICH MAY INJURY TISSUE IF NOT REMOVED PROMPTLY.

SKIN:

MAY BE ABSORBED THROUGH SKIN.

FREQUENT OR PROLONGED CONTACT WILL DRY AND DEFAT THE SKIN, POSSIBLY LEADING TO IRRITATION AND DERMATITIS. REPEATED CONTACT MAY SENSITIZE THE SKIN.

INHALATION:

HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. THIS MAY BE EVIDENCED BY GIDDINESS, HEADACHES, DIZZINESS, NAUSEA, VOMITING OR POSSIBLY UNCONSCIOUSNESS.

VAPORS, MIST OR SPRAY MAY CAUSE IRRITATION.

INGESTION:

EXPECTED TO CAUSE SOME IRRITATION OF THE MOUTH, ESOPHAGUS AND STOMACH.

CHRONIC EFFECTS:

CONTAINS ETHYLENE GLYCOL MONOBUTYL ETHER. ANIMAL STUDIES INDICATE FETAL AND TESTICULAR TOXICITY WITH RELATED GLYCOL ETHERS.

CHRONIC OVEREXPOSURE MAY CAUSE LIVER, KIDNEY AND BLOOD DISORDERS.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN EXISTING DERMATITIS. BREATHING OF VAPOR AND/OR MISTS MAY AGGRAVATE ASTHMA AND INFLAMMATORY OR FIBROTIC PULMONARY DISEASE.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! GIVE UP TO TWO (2) QUARTS OF WATER TO DILUTE. KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION. SEEK PROMPT MEDICAL ATTENTION.

* * * * * SECTION VI - REACTIVITY DATA * * * * *

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF NITROGEN AND SULFUR, CARBON DIOXIDE AND/OR CARBON MONOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

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CONDITIONS TO AVOID:

NOT APPLICABLE.

* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. ISOLATE SPILL AND STOP LEAK WHERE SAFE. CONTAIN AND ABSORB SPILL WITH AN INERT MATERIAL. SCOOP UP AND REMOVE.

WASTE DISPOSAL METHOD:

GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT ABSORBED MATERIAL TO SANITARY LANDFILL.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ORGANIC VAPOR CARTRIDGE RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION SHOULD BE USED IN AREAS WITHOUT GOOD CROSS VENTILATION.

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

WEAR GOGGLES AND/OR FACE SHIELD. PROVIDE EYEWASH AND QUICK DRENCH SYSTEM.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON TO PREVENT DIRECT SKIN CONTACT.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING HOWCO-SUDS FOAMING AGENT LIQUID

070.156020

WARNING!

MAY CAUSE HEADACHE, DIZZINESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS.

MAY CAUSE IRRITATION TO THE EYES, SKIN OR RESPIRATORY SYSTEM.

COMBUSTIBLE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

KEEP FROM HEAT, SPARKS, AND OPEN FLAME.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

IF CONTAINER RETAINS PRODUCT RESIDUES, LABEL PRECAUTIONS MUST BE OBSERVED.

STORE CONTAINER WITH CLOSURES IN PLACE. OFFER EMPTY CONTAINER TO RECONDITIONER OR RECYCLER FOR RECONDITIONING OR DISPOSAL. ENSURE RECONDITIONER OR RECYCLER IS AWARE OF THE PROPERTIES OF THE CONTENTS.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:
NOT RESTRICTED

IATA SHIPPING DESCRIPTION:
NOT RESTRICTED

IMO SHIPPING DESCRIPTION:
NOT RESTRICTED

CAN SHIPPING DESCRIPTION:
NOT RESTRICTED

ADR SHIPPING DESCRIPTION:
FLAMMABLE LIQUIDS-(CONTAINS GLYCOL ETHER)-3, 31, (C)-ADR

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* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: Y PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): N
CHRONIC (DELAYED): Y MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
N/A

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

COMPONENT NAME	CAS-REG-NO	PCT
ETHYLENE GLYCOL MONOBUTYL	111-76-2	11-30 %

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES	CEPA NE	EEC YES	ACON YES	NPR NE	DRSM NE
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F. EXTRACTION METAL AND TRACE CONTENTS

ARSENIC:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
BARIUM :	IN LIQUID > 100 MG/L,	SOLID > 10000 MG/KG	NO
CADIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
CHROMIUM(VI):	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
CHROMIUM(III):	IN LIQUID > 560 MG/L,	SOLID > 2500 MG/KG	NO
LEAD:	IN LIQUID > 5 MG/L,	SOLID > 1000 MG/KG	NO
MERCURY:	IN LIQUID > 0.2 MG/L,	SOLID > 2000 MG/KG	NO
SELENIUM:	IN LIQUID > 1 MG/L,	SOLID > 100 MG/KG	NO
SILVER:	IN LIQUID > 5 MG/L,	SOLID > 500 MG/KG	NO
ANTIMONY:	IN LIQUID > 15 MG/L,	SOLID > 500 MG/KG	NO
BERYLLIUM:	IN LIQUID > 0.75 MG/L,	SOLID > 75 MG/KG	NO
COBALT:	IN LIQUID > 80 MG/L,	SOLID > 8000 MG/KG	NO
COPPER:	IN LIQUID > 25 MG/L,	SOLID > 2500 MG/KG	NO
FLUORIDE:	IN LIQUID > 180 MG/L,	SOLID > 18000 MG/KG	NO
MOLYBDENUM:	IN LIQUID > 350 MG/L,	SOLID > 3500 MG/KG	NO

NICKEL:	IN LIQUID > 20 MG/L,	SOLID > 2000 MG/KG	NO
THALLIUM:	IN LIQUID > 7 MG/L,	SOLID > 700 MG/KG	NO
VANADIUM:	IN LIQUID > 24 MG/L,	SOLID > 2400 MG/KG	NO
ZINC:	IN LIQUID > 250 MG/L,	SOLID > 5000 MG/KG	NO
CYANIDE:	IN LIQUID > 250 MG/L,	SOLID > 250 MG/KG	NO
H2S:	IN LIQUID > 500 MG/L,	SOLID > 500 MG/KG	NO
ORGANO-TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
ORGANO-PHOS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
TIN:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED
PERSISTENT ORGANO-			
HALOGENS:	IN LIQUID OR	SOLID > 100 MG/L	NOT EVALUATED

G. OTHER COMPONENTS

CONTAINS BENZENE	NO
CONTAINS TOLUENE	NO
CONTAINS XYLENE	NO
REPORTABLE SPILL QUANTITY FOR BENZENE, TOLUENE, XYLENE	NOT APPLICABLE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

I. UNITED KINGDOM - DOE (CHEMICAL NOTIFICATION SCHEME)
TOXICITY CATEGORY

NOT EVALUATED

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THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. REGULATORY AFFAIRS DEPARTMENT, HALLIBURTON ENERGY SERVICES GROUP

HYDROCHLORIC ACID (NEAT), BULK

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MATERIAL SAFETY DATA SHEET
HALLIBURTON SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 10-09-92
REVISED DATE 04-09-92

EMERGENCY TELEPHONE: 405/251-3565 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: HYDROCHLORIC ACID (NEAT), BULK PART NUMBER: 070155300
PKG QTY: BULK APPLICATION: SOLVENT
SERVICE USED: CHEMICAL SERVICES, I. C.

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT+ + + + + + + + +	PERCENT	TLV	PEL
HYDROCHLORIC ACID	31-60 %	C 5 PPM	C 5 PPM

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
APPEARANCE	CLEAR, COLORLESS LIQUID
ODOR	PUNGENT, ACRID
SPECIFIC GRAVITY (H2O=1)	1.160
BULK DENSITY	9.66 LB/GAL
PH	0.8 FOR 1% SOL
SOLUBILITY IN WATER AT 20 DEG C. GMS/100ML H2O	MISCIBLE
BIODEGRADABILITY	N/D
PERCENT VOLATILES	35
EVAPORATION RATE(BUTYL ACETATE=1)	>1
VAPOR DENSITY	1.27
VAPOR PRESSURE (MMHG)	26.00
BOILING POINT(760 MMHG)	230 F / 110 C
POUR POINT	N/D
FREEZE POINT	- 50 F / - 45 C
SOLUBILITY IN SEAWATER	TOTALLY MISCIBLE
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

NFPA(704) RATING:

HEALTH 3	FLAMMABILITY 0	REACTIVITY 1	SPECIAL CORROSIVE
FLASH POINT	NONE		
AUTOIGNITION TEMPERATURE	N/A F /	N/A C	
FLAMMABLE LIMITS (% BY VOLUME)	LOWER N/A	UPPER N/A	

EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING
APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

MAY FORM EXPLOSIVE MIXTURE WITH STRONG ALKALIS.
REACTION WITH STEEL, AND CERTAIN OTHER METALS GENERATES FLAMMABLE AND
POTENTIALLY EXPLOSIVE HYDROGEN GAS. CONSIDERABLE HEAT IS EVOLVED WHEN
CONTACTED WITH MANY SUBSTANCES.
DO NOT ALLOW RUNOFF TO ENTER WATERWAYS.

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CONTACT CAUSES BURNS TO EYES AND SKIN.

* * * * * SECTION V - HEALTH HAZARD DATA * * * * *

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: TOX IHL-HMN LCLO:1300 MG/30M
TOX ORL-RBT LD50:900 MG/KG
TOX IHL-RAT LC50:3124 PPM/1H
AQU TLM96: 282 PPM

PRODUCT TLV: 5 PPM HCL

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE SEVERE BURNS WITH POSSIBLE PERMANENT TISSUE DAMAGE DEPENDING ON
THE LENGTH OF EXPOSURE AND THE FIRST AID ACTION GIVEN.

SKIN:

MAY CAUSE SEVERE BURNS WITH POSSIBLE PERMANENT TISSUE DAMAGE DEPENDING ON
THE LENGTH OF EXPOSURE AND THE FIRST AID ACTION GIVEN.

INHALATION:

VAPOR, MIST OR SPRAY CAUSE SEVERE IRRITATION OF UPPER RESPIRATORY SYSTEM.

INGESTION:

CORROSIVE TO MOUTH, ESOPHAGUS, AND STOMACH UPON INGESTION.

CHRONIC EFFECTS:

CONTINUED EXPOSURE CAN ERODE THE TEETH.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN
EXISTING DERMATITIS.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK
PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE
REMOVING CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION. WASH
CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION,
PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
SEEK PROMPT MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! GIVE UP TO TWO (2) QUARTS OF WATER TO DILUTE.

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL ATTENTION.

* * * * * SECTION VI - REACTIVITY DATA * * * * *

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

ALKALIES (EG. AMMONIA AND ITS SOLUTIONS, CARBONATES, SODIUM HYDROXIDE (CAUSTIC), POTASSIUM HYDROXIDE, CALCIUM HYDROXIDE, CYANIDES, SULFIDES, HYPOCHLORITES, CHLORITES) WHICH CAN GENERATE HEAT WITH SPLATTERING OR BOILING AND THE RELEASE OF TOXIC FUMES.

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HYDROCHLORIC ACID MAY GENERATE AND RELEASE FLAMMABLE HYDROGEN AND TOXIC CHLORINE GAS IN THE PRESENCE OF IRON. IN THE PRESENCE OF IRON SULFIDE, HYDROCHLORIC ACID MAY PRODUCE HIGHLY TOXIC HYDROGEN SULFIDE.

HAZARDOUS DECOMPOSITION PRODUCTS:

MAY RELEASE HYDROGEN AND CHLORINE GAS IN THE PRESENCE OF IRON, AND HYDROGEN SULFIDE IN THE PRESENCE OF IRON SULFIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

* * * * * SECTION VII - SPILL OR LEAK PROCEDURES * * * * *

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. ISOLATE SPILL AND STOP LEAK WHERE SAFE. CONTAIN AND NEUTRALIZE TO A PH OF 6-8. SCOOP UP AND REMOVE.

PREVENT RUNOFF FROM ENTERING SEWERS, LAKES, RIVERS, STREAMS OR PUBLIC WATER SUPPLIES.

WASTE DISPOSAL METHOD:

IF MATERIAL HAS BEEN COMPLETELY NEUTRALIZED, GET APPROVAL FROM A SANITARY LANDFILL OPERATOR AND TRANSPORT TO A SANITARY LANDFILL. IF NOT GET APPROVAL FROM HAZARDOUS WASTE DISPOSAL FACILITY, AUTHORIZED UNDER EPA/RCRA SUBTITLE C OR STATE EQUIVALENT. SHIP ABSORBED MATERIAL TO SITE.

* * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * *

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

ACID GAS CHEMICAL CARTRIDGE RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST VENTILATION SHOULD BE USED IN AREAS WITHOUT GOOD CROSS VENTILATION.

PROTECTIVE GLOVES:

BUTYL GLOVES.

EYE PROTECTION:

WEAR GOGGLES AND/OR FACE SHIELD. PROVIDE EYEWASH AND QUICK DRENCH SYSTEM.

OTHER PROTECTIVE EQUIPMENT:

RUBBER BOOTS.

WEAR FULL PROTECTIVE SUIT WHEN SKIN CONTACT IS POSSIBLE.

* * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * *

PRECAUTIONARY LABELING HYDROCHLORIC ACID (NEAT), BULK

070.155300

DANGER!

MAY CAUSE SEVERE IRRITATION TO EYES AND UPPER RESPIRATORY SYSTEM.

MAY CAUSE SEVERE EYE AND SKIN BURNS.

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM ALKALIES.

STORE IN A COOL WELL VENTILATED LOCATION.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

AVOID BREATHING VAPORS.

CONTAINER DISPOSITION:

CONTAINER SHOULD BE TRANSPORTED WITH ALL CLOSURES IN PLACE AND RETURNED FOR REUSE.

* * * * * SECTION X - TRANSPORTATION INFORMATION * * * * *

DOT SHIPPING DESCRIPTION:

RQ-HYDROCHLORIC ACID-CORROSIVE MATERIAL-UN1789 (RQ USED ONLY FOR PACKAGES CONTAINING 5000 # OR MORE HCL). PACKAGED:DOT MC-312 OR DOT-E 5403 (DELETE NON APPLICABLE TANK NUMBER)

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* * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * *

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y

CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
1,640 GALS. - HYDROCHLORIC ACID,

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)
PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

COMPONENT NAME	CAS-REG-NO	PCT
HYDROCHLORIC ACID	7647-01-0	31-60 %

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES	CEPA NE	EEC YES	ACoin YES	NPR NE	DRSM NE
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H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES MEET THE CRITERIA OF A HAZARDOUS WASTE BECAUSE OF:

CORROSIVITY

* * * * *

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY

SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. REGULATORY AFFAIRS DEPARTMENT, HALLIBURTON ENERGY SERVICES GROUP

DISCHARGE PLAN APPLICATION

Enclosure 4

Oilfield Service Facilities

Part VII. Form (Optional)

Sources and Quantities of Effluent and Waste Solids Generated at the Facility - For each source include types of effluents (e.g. salt water, hydrocarbons, sewage, etc.), estimated quantities in barrels or gallons per month, and types and volumes of major additives (e.g. acids, biocides, detergents, degreasers, etc.). Use of this form is optional, but the information requested must be provided.

<i>Waste Type</i>	<i>General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)</i>	<i>Volume Per Month (bbl or gal)</i>	<i>Major Additives (e.g. degreaser fluids from truck washing, soap in steam cleaners)</i>
1. <i>Truck Wastes</i> (Describe types of original contents trucked [e.g. brine, produced water, drilling fluids, oil wastes, etc])	Not Applicable		
2. <i>Truck, Tank & Drum Washing</i>	Washrack Water Dirt and Mud	65,000 gal/mo 16 cu.yds./mo	Soap
3. <i>Steam Cleaning of Parts, Equipment, Tanks</i>	Not Applicable		
4. <i>Solvent/Degreaser Use</i>	Safety Kleen		Not Applicable
5. <i>Spent Acids, Caustics, or Completion Fluids</i> (Describe)	Not Applicable		

<i>Waste Type</i>	<i>General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)</i>	<i>Volume Per Month (bbl or gal)</i>	<i>Major Additives (e.g. degreaser fluids from truck washing, soap in steam cleaners)</i>
6. <i>Waste Slop Oil</i>	Not Applicable		
7. <i>Waste Lubrication and Motor Oils</i>	Oil From Trucks	185 Gal/mo	None
8. <i>Oil Filters</i>	From Trucks & Engines	54 filters/mo	None
9. <i>Solids and Sludges from Tanks (Describe types of materials [e.g. crude oil tank bottoms, sand, etc.])</i>	Not Applicable		
10. <i>Painting Wastes</i>	Paint & Paint related Materials	6 gal/mo	Hardeners & Catalysts
11. <i>Sewage (Indicate if other wastes mixed with sewage; if no commingling, domestic sewage under jurisdiction of the NMEID)</i>	Sanitary Sewage comingled with industrial waste water from truck washing operation	65,000 gal/mo	Soap
12. <i>Other Waste Liquids (Describe in detail)</i>	Not Applicable		
13. <i>Other Waste Solids (Cement, construction materials, used drums)</i>	Used Drums	50 drums/mo	None

Oilfield Service Facilities

Part VIII. Form (Optional)

Summary Description of Existing Liquid and Solids Waste Collection and Disposal - For each waste type listed in Part VII, provide summary information about onsite collection and disposal systems. Information on basic construction features, specific descriptions, and wastewater schematics should be provided as required in the Guidelines. The use of this form is optional, but the summary information requested must be provided.

Waste Type	Tank(T)/ Drum(S)	Floor Drain/(F) Sump(S)	Pits- Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field	Offsite Disposal
1. Truck Wastes	Not Applicable					
2. Truck, Tank and Drum Washing	(S) Washrack, Floor Sump, Offsite Disposal (Washrack Sludge is solidified tested by TXLP and removed to disposal site approved by OCD)	(L)	-	-	-	Sewer
3. Stream Cleaning of Parts, Equipment, Tanks	Not Applicable					
4. Solvent/Degreaser Use	(S) Safety Kleen	-	-	-	-	Safety Kleen
5. Spent Acids, Caustics, or Completion Fluids	Not Applicable					
6. Waste Slop Oil	Not Applicable					

Waste Type	Tank(T)/ Drum(S)	Floor Drain/(F) Sump(S)	Pits- Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field	Offsite Disposal
7. Waste Lubrication and Motor Oils	(T) Picked up by state certified Waste Oil Recovery Co. (Included in Fax)	-	-	-	-	X
8. Oil Filters	(S) Returned to Duncan, OK for Disposal	-	-	-	-	X
9. Solids and Sludges from Tanks	Not Applicable					
10. Painting Wastes	(D) Used paint thinner is drummed and sent to Duncan, OK for Disposal	-	-	-	-	X
11. Sewage	-	-	-	-	-	X
12. Other Waste Liquids	Not Applicable					
13. Other Waste Solids	(S) 50 Used Drums	-	-	-	-	X

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

Copy

PART I
GENERAL INFORMATION

Enclosure 6

1. Name of facility Halliburton Services
2. Type of facility Petroleum Industry Service Location
3. Location of facility 4109 East Main Farmington, New Mexico

4. Name and address of owner or operator:

Name Halliburton Services

Address Drawer 960

Farmington, New Mexico 87499

5. Designated person accountable for oil spill prevention at facility:

Name and title David S. King District Manager

6. Facility experienced a reportable oil spill event during the twelve months prior to Jan. 10, 1974 (effective date of 40 CFR, Part 112). Of YES, complete Attachment #1.) No

MANAGEMENT APPROVAL

This SPOC Plan will be implemented as herein described.

Signature [Signature]

Name David S. King

Title District Manager

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Printed Name of Registered Professional Engineer

(Seal)

Signature of Registered Professional Engineer

Date

Registration No. State

PART I
GENERAL INFORMATION

7. Potential Spills — Prediction & Control:

Source	Major Type of Failure	Total Quantity (bbls)	Rate (bbls/hr)	Direction of Flow*	Secondary Containment
Diesel	Broken Discharge Hose	143	36	South	Sand to absorb and contain
Gasoline	Broken Discharge Hose	143	36	South	Sand to absorb and contain
Acid	Broken pipe	312	194	South	Retaining Wall
Liquid Gel Concentrate	Broken pipe	95	147	South	Sand to absorb and contain

TANKS REMOVED SEPT. 91

Discussion:

~~The diesel and gasoline tanks are underground tanks with suction plumbing to the pump. The acid and liquid gel concentration tanks are above ground tanks with double ball valves for safety and containment. See attached sight plan for location of tanks described.~~

*Attach map if appropriate.

Name of facility Farmington, New Mexico CampOperator Halliburton Services

**PART I
GENERAL INFORMATION**

[Response to statements should be: YES, NO, or NA (Not Applicable).]

8. Containment or diversionary structures or equipment to prevent oil from reaching navigable waters are practicable. (If NO, complete Attachment #2.) No

9. Inspections and Records

A. The required inspections follow written procedures.

N/A

B. The written procedures and a record of inspections, signed by the appropriate supervisor or inspector, are attached.

N/A

Discussion: _____

10. Personnel Training and Spill Prevention Procedures

A. Personnel are properly instructed in the following:

- (1) operation and maintenance of equipment to prevent oil discharges, and
(2) applicable pollution control laws, rules, and regulations.

Yes
Yes

Describe procedures employed for instruction: _____

Company safety meetings held weekly

B. Scheduled prevention briefings for the operating personnel are conducted frequently enough to assure adequate understanding of the SPCC Plan. _____

Describe briefing program: Company Safety Meetings

Name of facility Farmington, New Mexico Camp

Operator Halliburton Services

(Prior to completing Part II, Alternate A, refer to regulations and instructions pages 6-7.)

**PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)**

A. Facility Drainage

1. Drainage from diked storage areas is controlled as follows (include operating description of valves, pumps, ejectors, etc. (Note: Flapper-type valves should not be used)):

Acid tank has a dike with 1½ times storage capacity

2. Drainage from undiked areas is controlled as follows (include description of ponds, lagoons, or catchment basins and methods of retaining and returning oil to facility):

Sight plan attached

3. The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open watercourse is as follows (include description of (a) inspection for pollutants, and (b) method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment #3):

Quarterly Briefing meetings are scheduled to discuss
SPCC plans and any problems that may exist

Chairman	Gary L. Morris	District Training and Safety Sup.
Diesel and Gasoline	Gary Prezekurat	District Warehouseman
L.G.C.	E.C. Lasster	Frac Operator
Acid	John Newton	Special Operator
Chemical Drum Storage	Bryan Voegeli	F.E.O.
Bulk Plant	Rich Calkin	Bulk Plant Operator

Name of facility Farmington, New Mexico Camp

Operator Halliburton Services

**PART II. ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)**

[Response to statements should be: YES, NO, or NA (Not Applicable).]

B. Bulk Storage Tanks

1. Describe tank design, materials of construction, fail-safe engineering features, and if needed, corrosion protection: Acid Tank Lined steel painted tank
LGC tank is unlined steel painted tank
~~Diesel and Gasoline tanks are steel construction underground~~
REMOVED. SEPT. 91

2. Describe secondary containment design, construction materials, and volume:
Acid tank is only tank with secondary containment
It is constructed of painted cinder block

3. Describe tank inspection methods, procedures, and record keeping:
~~Underground tanks have yearly tightness tests performed~~
~~and are monitored daily~~

1. Internal heating coil leakage is controlled by one or more of the following control factors:

(a) Monitoring the steam return or exhaust lines for oil. N/A

Describe monitoring procedure: _____

(b) Passing the steam return or exhaust lines through a settling tank, skimmer, or other separation system. N/A

(c) Installing external heating systems. N/A

5. Disposal facilities for plant effluents discharged into navigable waters are observed frequently for indication of possible upsets which may cause an oil spill event. Yes

Describe method and frequency of observations: _____

Visual inspection daily by administration and
spill containment committee

Name of facility Farmington, New Mexico Camp

Operator Halliburton Services

**PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)**

(Response to statements should be: YES, NO, or NA (Not Applicable).)

C. Facility Transfer Operations, Pumping, and In-plant Process

1. Corrosion protection for buried pipelines:

- (a) Pipelines are wrapped and coated to reduce corrosion. N/A
- (b) Cathodic protection is provided for pipelines if determined necessary by electrolytic testing. N/A
- (c) When a pipeline section is exposed, it is examined and corrective action taken as necessary. N/A

2. Pipeline terminal connections are capped or blank-flanged and marked if the pipeline is not in service or on standby service for extended periods. N/A
Describe criteria for determining when to cap or blank-flange: _____

3. Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. N/A
Describe pipe support design: _____

4. Describe procedures for regularly examining all above-ground valves and pipelines (including flange joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces):

Visual weekly by administration and spill containment committee

5. Describe procedures for warning vehicles entering the facility to avoid damaging above-ground piping:

All of the plumbing on the acid tank is within the retaining wall. All of the plumbing on the LGC tank is under the tank so as not to create a vehicle danger. The diesel and gasoline tanks are underground. REMOVED SEPT. 91

Name of facility Farmington, New Mexico Camp

Operator Halliburton Services

**PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)**

[Response to statements should be: YES, NO, or NA (Not Applicable).]

D. Facility Tank Car & Tank Truck Loading/Unloading Rack

Tank car and tank truck loading/unloading occurs at the facility. (If YES, complete 1 through 5 below.)

Yes

1. Loading/unloading procedures meet the minimum requirements and regulations of the Department of Transportation.

No

2. The unloading area has a quick drainage system.

No

3. The containment system will hold the maximum capacity of any single compartment of a tank truck loaded/unloaded in the plant.

Yes

Describe containment system design, construction materials, and volume:

Acid tank has the containment system to hold the unloading
bulk distributor's product. It is constructed of painted
cinder blocks and will hold 356 bbl. of product.

4. An interlocked warning light, a physical barrier system, or warning signs are provided in loading/unloading areas to prevent vehicular departure before disconnect of transfer lines.

No

Describe methods, procedures, and/or equipment used to prevent premature vehicular departure:

Personnel operating the delivery trucks are responsible for
proper and safe hose handling and truck maneuvering.

5. Drains and outlets on tank trucks and tank cars are checked for leakage before loading/unloading or departure.

Name of facility Farmington, New Mexico Camp

Operator Halliburton Services

**PART II, ALTERNATE A
DESIGN AND OPERATING INFORMATION
ONSHORE FACILITY (EXCLUDING PRODUCTION)**

{Response to statements should be: YES, NO, or NA (Not Applicable).}

4. Security

- | | |
|--|------------|
| 1. Plants handling, processing, or storing oil are fenced. | <u>Yes</u> |
| 2. Entrance gates are locked and/or guarded when the plant is unattended or not in production. | <u>Yes</u> |
| 3. Any valves which permit direct outward flow of a tank's contents are locked closed when in non-operating or standby status. | <u>No</u> |
| 4. Starter controls on all oil pumps in non-operating or standby status are: | <u>N/A</u> |
| (a) locked in the off position; | |
| (b) located at site accessible only to authorized personnel. | |

5. Discussion of items 1 through 4 as appropriate: This facility is manned 7 days a week 24 hours per day and competent personnel are available upon call.

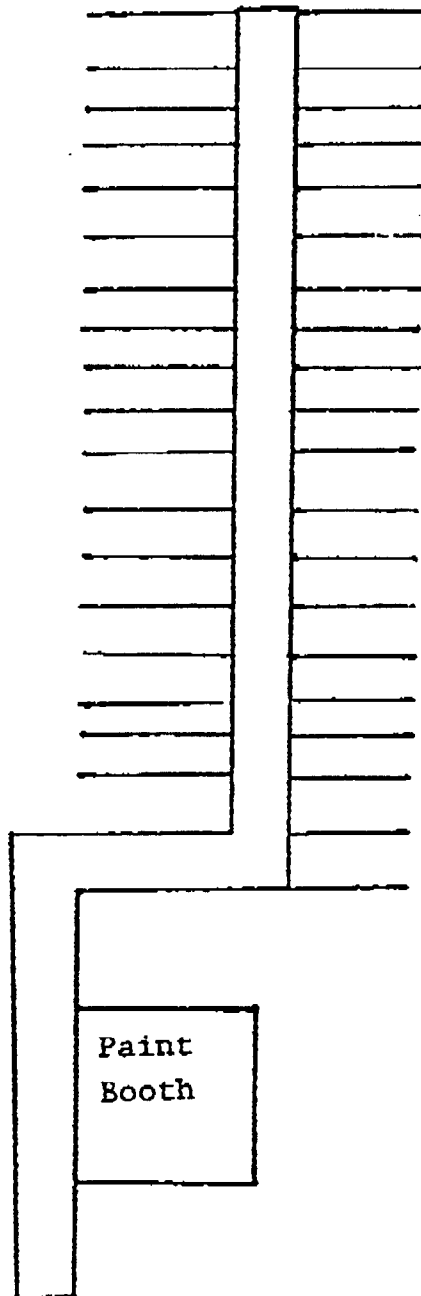
6. Discussion of the lighting around the facility:
The facility is adequately lighted to meet all safety and security needs

Name of facility Farmington, New Mexico Camp

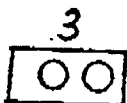
Operator Halliburton Services

HALLIBURTON SERVICES
Farmington, New Mexico Camp

- ~~1. Diesel and Gas Tanks~~
REMOVED SEPT. 91
2. Acid Tank
3. LGC Tank

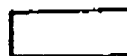
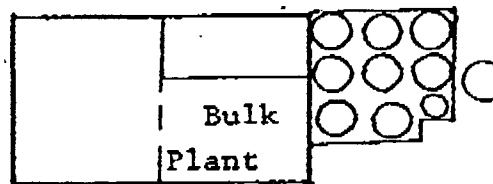
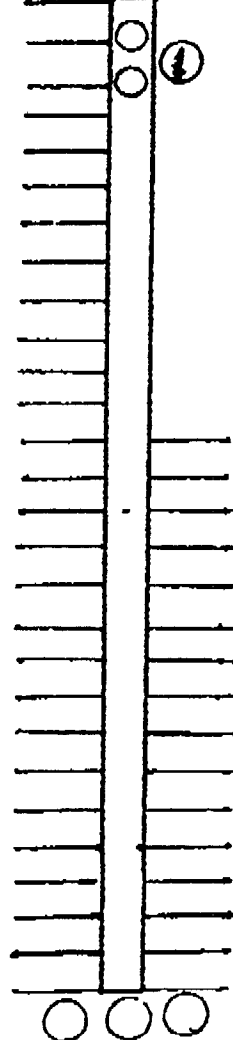


LGC Plant

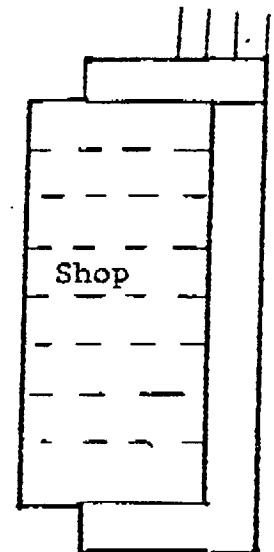


Office

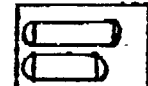
Fuel Island



Entrance



Tool Room



Acid Dock

Wash Rack