GW - 269

PERMITS, RENEWALS, & MODS Application

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

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

Jami Bailey
Division Director
Oil Conservation Division

FEBRUARY 9, 2012

Ms. Rose Slade
Southern Union Gas Services
801 S. Loop 464
Monahans, Texas 79756

Dear Ms. Slade:

Based on your responses given in the "Oil & Gas Facilities Questionnaire for Determination of a WQCC Discharge Permit" and a file review, the Oil Conservation Division (OCD) has determined that one of your facilities with an expired or soon to be expired permit is not required to operate under a Water Quality Control Commission (WQCC) Discharge Permit. This means that the WQCC Discharge Permit for GW-269 (Boyd CS) is hereby rescinded and you are not required to proceed with the renewal of this expired WQCC Discharge Permit. OCD will close this discharge permit in its database.

Previously, SUG has conducted abatement of ground water contamination at this facility under the authority of its WQCC Discharge Permits, pursuant to 20.6.2.4000 NMAC (PREVENTION AND ABATEMENT OF WATER POLLUTION). OCD has determined that SUG does not intentionally discharge at these three facilities; therefore, no WQCC Discharge Permit is required. However, because of existing ground water contamination at this facility, OCD is requiring SUG to continue to abate pollution of ground water pursuant to 19.15.30 NMAC (REMEDIATION). The new Abatement Plan case number for the former GW-199 site is **AP-106**. Please use this Abatement Plan case number in all future correspondence.

Because this WQCC Discharge Permit will now longer be in effect, you may be required to obtain separate OCD permit(s) for other processes at your facility, such as: pits, ponds, impoundments, below-grade tanks; waste treatment, storage and disposal operations; and landfarms and landfills. OCD will determine if any of these existing processes may require a separate permit under OCD's Oil, Gas, and Geothermal regulations. If OCD determines that a separate permit(s) is required, then a letter will be sent to you indicating what type of permit is required.

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

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

Thank you for your cooperation.

Jami Bailey
Director

JB/gvg

RECEIVED
MAY 11 2007
SOUTHERN UNION GAS SERVICES, LTD.

ATTACHMENT TO THE DISCHARGE PERMIT

Southern Union Gas Services, LTD, Boyd COMPRESSOR STATION (GW-269)
DISCHARGE PERMIT APPROVAL CONDITIONS
May 8, 2007

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee and the $400 permit fee for a gas compressor station less than 1000 horsepower.

2. **Permit Expiration and Renewal:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on December 18, 2011** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

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

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its January 04, 2007 discharge plan renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3107.C, and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

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

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

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

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

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

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

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

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

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit

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

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

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

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

12. Underground Process/Wastewater Lines:

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

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

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

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

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

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

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

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

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: N/A

21. Transfer of Discharge Permit (WQCC 20.6.2.3111) Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transfer or shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

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

23. Certification: Southern Union Gas Services, LTD, (Owner/Operator), by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. **Owner/Operator** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Southern Union Gas Services, LTD.
Company Name-print name above

Bruce M. Williams
Company Representative- print name

Bruce M. Williams
Company Representative- signature

Title VP Gas Operations

Date: 6/1/07

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 1/11/07

or cash received on _____ in the amount of $ 400.00

from Southern Union Gas Services

for GW-269

Submitted by: Lawrence Romero Date: 1/19/07

Submitted to ASD by: Lawrence Romero Date: 1/19/07

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

Southern Union
Gas Services

2007 JUN 4 AM 9 31

301 Commerce Street, Ste. 700
Fort Worth, TX 76102

817.302.9400 Fax: 817.302.9350

Via Fedex

Wayne Price
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Signed Copies of Discharge Permits

Dear Mr. Price,

Please find attached signed copies of Discharge Permits for the following facilities:

Facility	**Permit Number**
Boyd Compressor Station	GW-269
C-1 Compressor Station	GW-259
C-2 Compressor Station	GW-260
C-3 Compressor Station	GW-261
C-4 Compressor Station	GW-262
House Compressor Station	GW-243

If you have any questions or need further information, please contact me at 817-302-9425.

Sincerely,

Herb Harless
0207

Cc: Randall Dunn w/attachments
Tony Savoie w/attachments
Molly Smitherman

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

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

January 26, 2007

DRAFT
Wayne J. Farley
Southern Union Gas Services, LTD
301 Commerce Street, Suite 700
Forth Worth, Texas 76102

Re: Discharge Permit GW-269
Boyd Compressor Station

Dear Mr. Farley:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3000 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the Southern Union Gas Services, LTD (owner/operator) Boyd Compressor Station GW-269 located in the SE/4 SE/4 Section 11-Township 20S-Range 38E, NMPM, Lea County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter including permit fees.**

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

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

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/cc
Attachments-1
xc: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT

Southern Union Gas Services, LTD, Boyd COMPRESSOR STATION (GW-269)
DISCHARGE PERMIT APPROVAL CONDITIONS
January 26, 2006

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee and the $400 permit fee for a gas compressor station less than 1000 horsepower.

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

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B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and

approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

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19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: N/A

21. Transfer of Discharge Permit (WQCC 20.6.2.3111) Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transfer or shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee.
Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

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

23. Certification: Southern Union Gas Services, LTD, (Owner/Operator), by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. **Owner/Operator** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

_____
Company Name-print name above

_____
Company Representative- print name

_____
Company Representative- signature

Title_____

Date:_____

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 1/11/07

or cash received on _____ in the amount of $ 400 00

from Southern Union Gas Services

for GW-269

Submitted by: Lawrence Romero Date: 1/19/07

Submitted to ASD by: Lawrence Romero Date: 1/19/07

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

Environmental Services, Inc.
8220 Louisiana NE
Suite A
Albuquerque, NM 87113-2121

[redacted]
95-32/1070

Jan 11 20 07

PAY TO THE ORDER OF Water Quality Management Fund $ 400.00

Four Hundred and 00/100 DOLLARS

Security features are included. Details on back.

BANK OF AMERICA
NATIONAL ASSOCIATION
ALBUQUERQUE, NM 87102

FOR GW-269 Permit Fee - SUG 008

[redacted]

MP

ORIGINAL

Environmental Services Inc.

Application for Renewal
Groundwater Discharge Plan

Boyd Compressor Station

Southern Union Gas Services, LTD
301 Commerce St., Ste. 700
Fort Worth, TX 76102

January 2007 SUG 008

8220 Louisiana NE, Suite A, Albuquerque, NM 87113
tel 505.266.6611 fax 505.266.7738

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

State of New Mexico
Energy Minerals and Natural Resources

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

Revised June 10, 2003

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

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

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

☐ New ☒ Renewal ☐ Modification

1. Type: Boyd Compressor Station
2. Operator: Southern Union Gas Services, LTD

   Address: 301 Commerce Street, Suite 700, Fort Worth, TX ~~79102~~ 76102

   Contact Person: Wayne Farley Phone: (817) 302-9400
3. Location: NE /4 SE /4 Section 26 Township 22S Range 37E
   Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Wayne J. Farley Title: Vice President, Gas Operations

Signature: Wayne J Farley Date: 1-4-07

E-mail Address: wayne.farley@sug.com

Boyd Compressor Station Discharge Plan

Southern Union Gas Services, LTD—Boyd Compressor Station

This document constitutes a renewal application for the groundwater discharge plan for the Boyd Compressor Station (GW-269). This Discharge Plan application has been prepared in accordance with the New Mexico Oil Conservation Division's (OCD) *Guidelines for the Preparation of Discharge Plans at Natural Gas Plants, Refineries, Compressor and Crude Oil Pump Stations* (revised 12-95) and New Mexico Water Quality Control Commission regulations at 20.6.2 New Mexico Administrative Code (NMAC).

1 TYPE OF OPERATION

The Boyd Compressor Station (Boyd) is a natural gas compressor station. Its purpose is to remove excess liquids from field natural gas, measure gas volume, and transport it through pipelines. The site-rated horsepower at the facility is 560.

2 OPERATOR/LEGALLY RESPONSIBLE PARTY

Operator
Southern Union Gas Services, LTD
Attn: Randall Dunn
Box 1226, Jal, NM 88252
(505) 395-2116

Legally Responsible Party
Southern Union Gas Services, LTD
Attn: Wayne J. Farley
301 Commerce Street, Suite 700
Fort Worth, TX 76102
(817) 390-8686

3 LOCATION OF DISCHARGE/FACILITY

Lea County, NM
Section 26, Township 22 South, Range 37 East

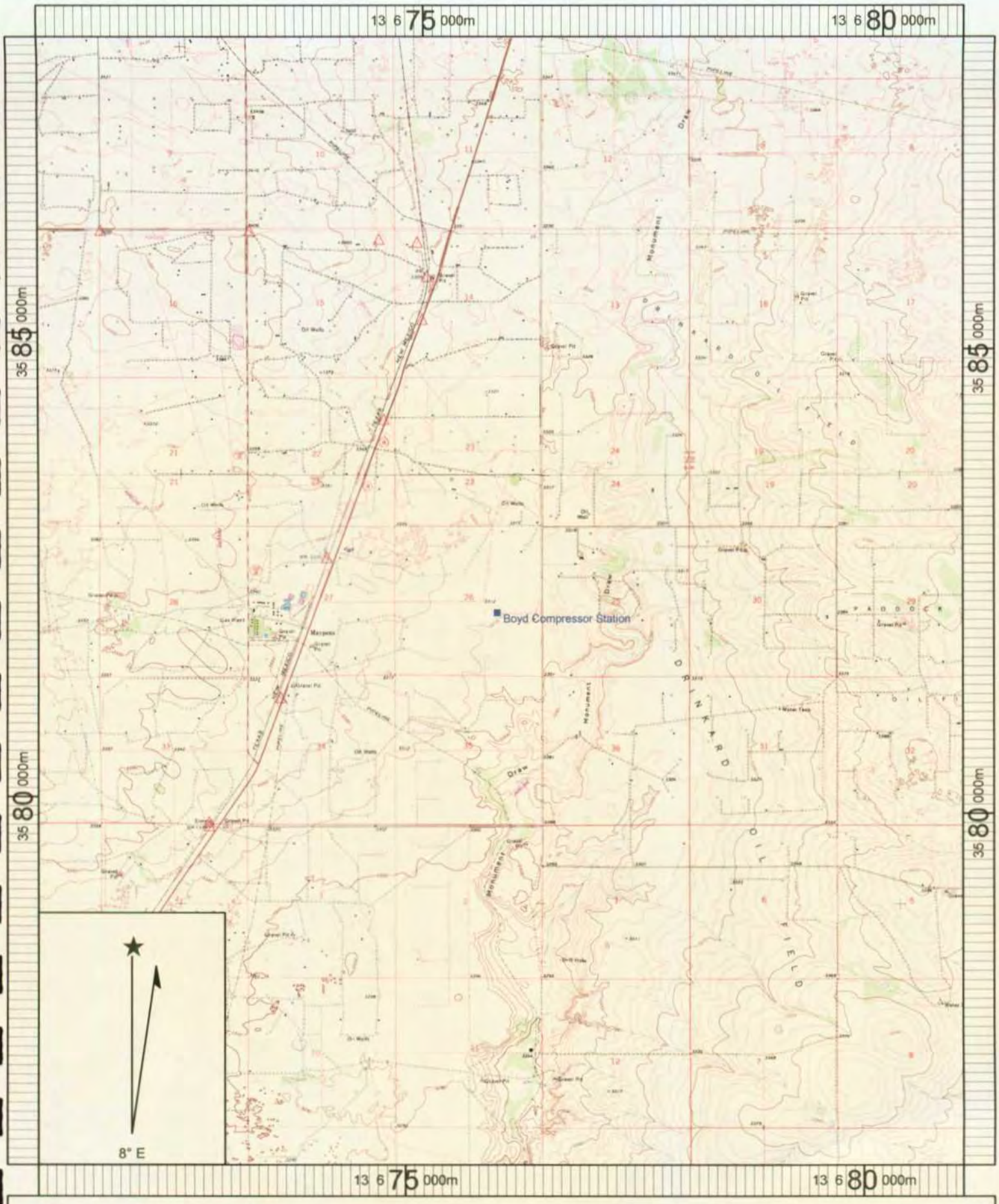
A portion of the Rattlesnake Canyon 7.5' map showing the location of the facility can be found in Figure 1.

4 LANDOWNER

RD Simms
PO Box 922
Eunice, NM 88231

5 FACILITY DESCRIPTION

A C-drip inlet scrubber is utilized at Boyd to remove liquids from the inlet gas to the station. The gas is routed through a suction scrubber north of the compressor for further liquid removal. Liquids removed from both scrubbers are transported via underground pipelines to the scrubber liquids (drip) tank. The gas then enters a compressor driven by a 560-horspower natural gas-fired engine (a Waukesha 5108). The gas discharged from the compressor is transported off-site for further processing via pipeline. A simplified process flow diagram and a facility layout can be found in Figures 2 and 3, respectively.



Name: RATTLESNAKE CANYON
Date: 1/10/2007
Scale: 1 inch equals 4444 feet

Location: 13 0675936 E 3582196 N
Caption: Figure 1
Site Location

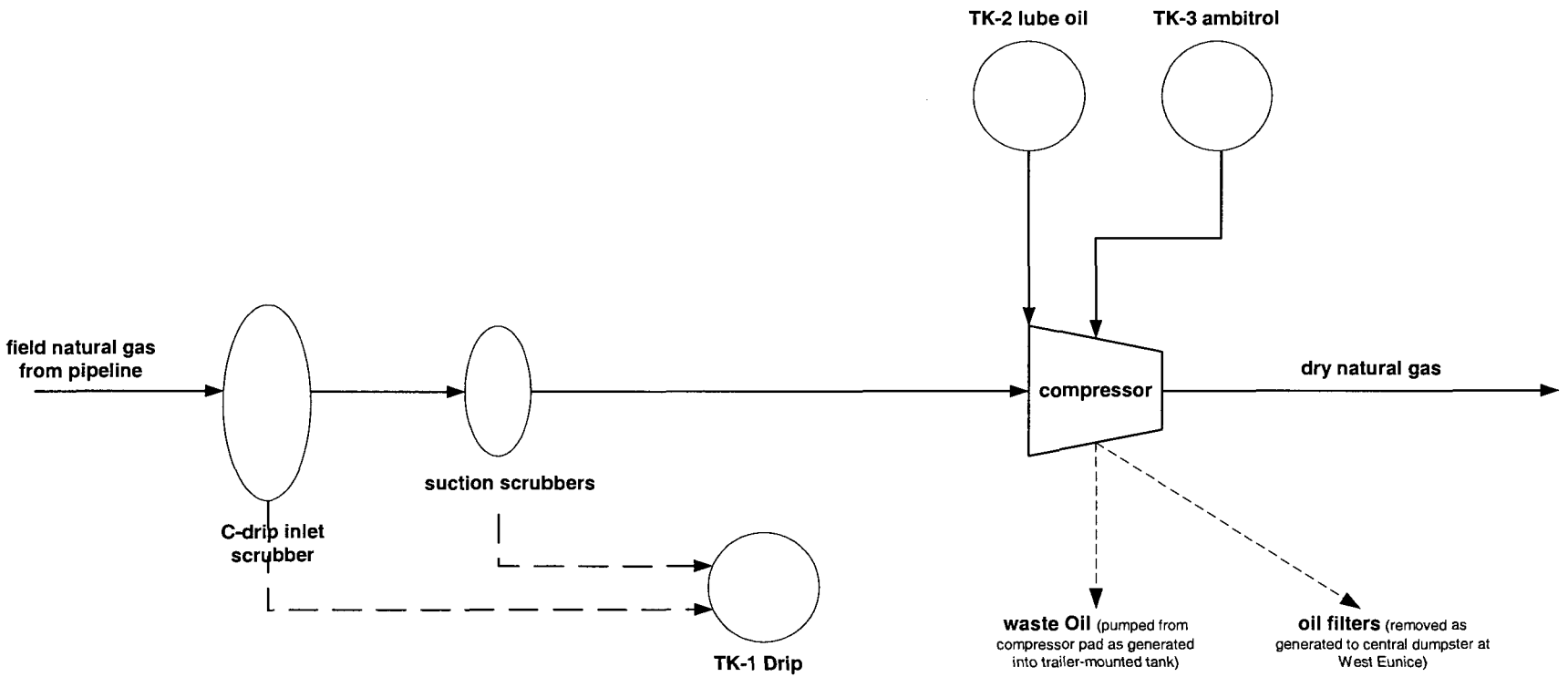


Figure 2
Block Flow Diagram
Southern Union Gas Services, LTD - Boyd Compressor Station

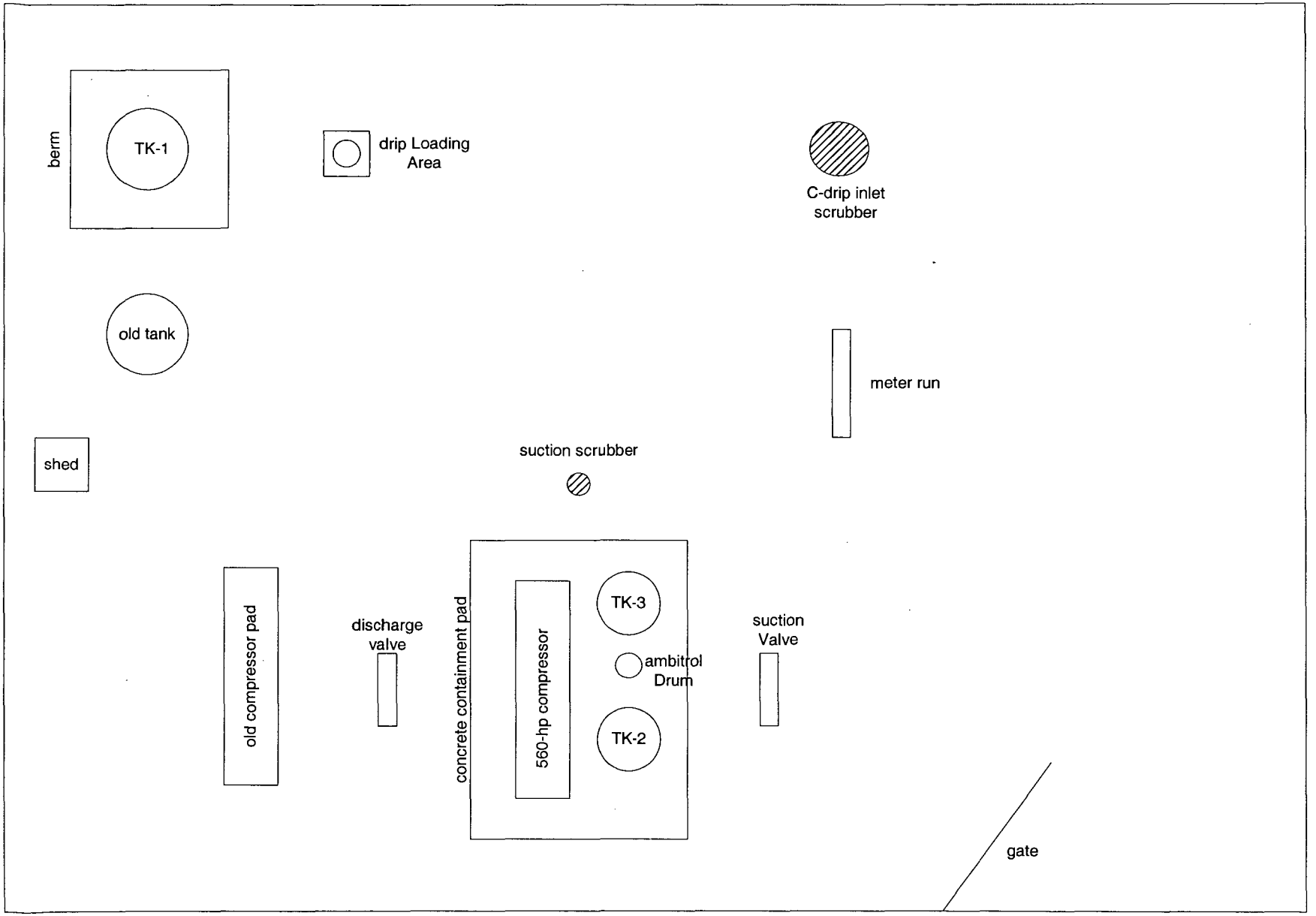


Figure 3
Site Diagram
Southern Union Gas Services, LTD - Boyd Compressor Station

6 MATERIAL STORED AND USED

Table 1 identifies materials and storage containments for substances used and stored at Boyd. Material Safety Data Sheets (MSDS) for these substances are in Appendix 1.

Table 1
Material Used and Stored

Container	ID	Material	Form	Volume	Location	Containment
AGT Steel	TK-1	Scrubber liquids (drip)	Liquid	463 bbl	NW corner of the facility	Secondary containment, dirt berm
AGT-elev Steel	TK-2	Lube Oil	Liquid	300 gal	East of compressor (on compressor pad)	Impermeable (cement) curbed containment pad
AGT-elev Steel	TK-3	Ambirtol	Liquid	200 gal	East of compressor (on compressor pad)	Impermeable (cement) curbed containment pad
Drum Steel		Ambirtol	Liquid	55 gal	East of compressor (on compressor pad)	Impermeable (cement) curbed containment pad

AGT - aboveground tank (non-pressurized)
AGT-elev - aboveground tank elevated on a saddle rack
Drum - 55-gallon drum

A 435-barrel aboveground tank (AGT) receives scrubber liquids (drip) from the C-drip inlet and suction scrubbers via underground piping. The tank is surrounded by an earthen berm. Each of the aboveground elevated tanks (lube oil and Ambitrol) and the drum (Ambitrol) are located on the compressor pad; an impermeable cement pad and curb type containment.

An 80-barrel fiberglass below grade storage tank, which is no longer used, is located on the facility (see Figure 3). When in use, this tank contained water that had been separated from hydrocarbons in the scrubber liquids tank. This tank is not expected to be returned to service at the facility.

7 SOURCES AND QUANTITIES OF EFFLUENT AND WASTE SOLIDS

Table 2 summarizes the effluent and solid wastes generated at the facility.

Table 2
Effluent and Solid Waste Sources and Quantity

Source	Unit	Type of Waste	Volume	Quality
Compressor	Waukesha 5108 560-hp	Used engine oil	80 gal/mo	Used motor oil with no additives
		Used filters	7/mo	No additives
		Washdown water	75 gal/mo	Water with detergens, lube oil, coolant
		Sorbent material/rags	varies	No additives
Scrubbers	C-drip and suction	Srubber liquids: hydrocarbon liquids & water	5 bbls/wk	No additives
Miscellaneous	trash	solid waste	varies	varies

Ambitrol, comprised of 50% water and 50% ethylene glycol, is utilized as coolant for the compressor engine. The amount of Ambitrol used at the facility varies according to need. Very little waste coolant is generated as the cooling system is sealed. What loss does occur is primarily evaporation during engine use. A small amount of Ambitrol may occasionally be found in the washdown water.

The compressor pad is washed once a month using a portable high-pressure system. Occasionally, approximately 3 gallons of a biodegradable detergent, F218, is added to the wash water for cleaning. The detergent is not stored at the facility but is brought in as

needed. Wash water is pumped as generated from the compressor pad or sump into a trailer-mounted tank during washing.

8 LIQUID AND SOLID WASTE COLLECTION/STORAGE/DISPOSAL

Effluent and waste is removed and disposed of elsewhere as identified on Table 3

Table 3
Liquid and solid waste collection/storage/disposal

Type of Waste	Collection	Storage	Hauled by	Disposal
Used oil	Pumped from compressor pad or drum into trailer-mounted tank	Not Stored on-site; removed as generated	Sid Richardson to Jal #3 gas plant. See GW-010.	Used oil stored in waste oil tank at Jal #3. Removed by Industrial Service. Corp. See GW-010.
Used filters sorbent materials and rags	Filters drained onto compressor pad (see above); filters/rags taken to West Eunice Compressor Station as generated	Central dumpster at West Eunice	Sid Richarson temporarily stored at West Eunice, Quell Petroleum to incinerator	Quell Petroleum Services-incinerator
Wash water	Pumped from compressor pad or drum into trailer-mounted tank	Not Stored on-site; removed as generated	Sid Richardson to Jal #3 gas plant. See GW-010.	Wash water stored in classifer tank. Any hydrocarbons are pumped to scrubber liquid tanks and removed by XL. Water disposed in injection well at Jal #3. See GW-010
Scrubber liquids (drip)/water	Underground piping from C-drip and suction scrubbers	TK-1	Chaparral Trucking to Sid Richardso's Jal #4 compressor. See GW-107.	Scrubber liquids stored in scrubber liquid tanks. Hydrocarbons are sold to PetroSource. Water is removed by Chapparal Trucking. See GW-107
Solid waste	None on-site	Not Stored on-site; removed as generated	Sid Richardson	Sid Richardson's Jal #3 gas plant, see GW-010

Southern Union Gas Services, LDT, Jal #3 Gas Plant-see GW-010; Jal #4 Compressor Station-see GW-107
Quell Petroleum Services, PO Box 1552, Monahans, TX 79756, (915) 943-8400.
Chaparral Trucking, PO Drawer 1769, Eunice, NM 88231, (505) 394-2545
Industrial Service Corp., PO Box 711, Slaton, TX 79364, (915) 828-3183
PetroSource Partners Ltd., 129 S. Grimes, Hobbs, NM 88240, (505) 397-7212
XL Transportation Co., PO Drawer A, Jal, NM 88252, (505) 395-2010

A load line collection point is located east of the scrubber liquids tank (TK-1). Scrubber liquids are collected from this point. A metal container is embedded in the ground under the collection valve to catch any spills or leakage and prevent soil contamination. Any liquids collected in the metal container are removed as generated with the scrubber liquids.

9 PROPOSED MODIFICATIONS

Southern Union Gas Services, LTD does not propose any modifications at this time.

10 INSPECTION, MAINTENANCE, AND REPORTING

Boyd is unmanned but inspected at least once per day Monday through Friday. The station is equipped with an alarm system that notifies operators in Jal of an emergency or malfunction.

Southern Union Gas Services, LTD will perform pressure testing on underground effluent pipelines within five years of issuance of this discharge plan. A testing timetable will be submitted to the NMOCD for approval six months prior to testing.

The scrubber liquids (drip) tank (TK-1) will be cleaned out and visually inspected once every five years, as they are not situated on concrete or gravel pads.

11 SPILL/LEAK PREVENTION AND REPORTING (CONTINGENCY PLANS)

The process area of the plant is graveled to allow for early leak detection and quick response by facility personnel in the event of a leak of process fluids Southern Union Gas Services, LTD will handle all spills as required by the spill procedures in Appendix 3 and report all spills and leaks according to the requirements of the state of New Mexico found in 19.5.3.106 NMAC. A copy of this regulation is in Appendix 3.

12 SITE CHARACTERISTICS

The Boyd Compressor Station is located on dune sands of the Eunice Plain in the Capitan Basin. The Eunice Plain is underlain by a hard caliche surface and is almost entirely covered by reddish-brown dune sand 20—40 feet high (Nicholson and Clebsch, *Ground-Water Report 6: Geology and Ground-Water Conditions in Southern Lea County, New Mexico,* New Mexico Bureau of Mines & Mineral Resources, 1961).

Monument Draw is located approximately one mile east of the compressor station. According to the Rattlesnake Canyon and Eunice SE 7.5" U.S.G.S. quadrangle map, this appears to be the only discharge site within 1 mile of the facility.

As of October 1996, two wells were recorded with the New Mexico State Engineer Office in Roswell within one-half mile of the perimeter of the facility. One unused well was drilled in 1953 and is located one-quarter mile northeast of the facility. The highest recorded water level in this well was 48 feet; the lowest was 63 feet below grade. The second well, use unknown, is located one-half mile north of the facility. Upon completion of this shallow well drilled in 1968, depth to groundwater was 65 feet.

Water from a well located approximately 2 miles northeast of the compressor station was analyzed in 1953, 1955, and 1958 (Nicholson and Clebsch, *Ground-Water Report 6: Geology and Ground-Water Conditions in Southern Lea County, New Mexico,* New Mexico Bureau of Mines & Mineral Resources, 1961). Total dissolved solids concentration recorded at this well for each year the water was analyzed was 10801 1360, and 1080 parts per million, respectively. Typically, as described below, water from the aquifer under the compressor station has a much higher total dissolved solids concentration. The total dissolved solids concentration at the facility is estimated to be around 1150 parts per million, the average of these three analyses.

A piezometeric map of the water table (Nicholson and Clebsch, *Ground-Water Report 6: Geology and Ground-Water Conditions in Southern Lea County, New Mexico,* New Mexico Bureau of Mines & Mineral Resources, 1961) shows the elevation of the water table at the site to be about 3275 feet. The elevation of the facility is 3312 feet, placing the depth to the water table at the site at 37 feet.

The aquifers below the facility are the poorly consolidated sands of the Ogallala Formation, the deeper, Triassic Dockum Group of hematite-cemented clay and sandstones, and the deeper Paleozoic dolomitic limestones. Water in the Ogallala Formation has total dissolved solids of less than 1100 ppm. The total dissolved solids in the Dockum Group is higher that that of the Ogallala. The deeper Paleozoic aquifers do not contain usable water and are brine-injected (Nicholson and Clebsch, *Ground-Water Report 6: Geology and Ground-Water Conditions in Southern Lea County, New Mexico,* New Mexico Bureau of Mines & Mineral Resources, 1961).

The soil type at the facility is Pyote and Maljamar fine sands series. The Pyote series consist of well-drained soils that have a fine sandy loam subsoil and form in wind-deposited sediments on upland plains and alluvial fans. The Maljamar series consist of well-drained soils that have a sandy clay loam subsoil (Soil Survey, Lea County, New Mexico, 1974, U.S.D.A., Soil Conservation Survey).

Flooding potential at the facility is moderate as the site is located on soils that have moderately rapid permeability and very slow runoff (Soil Survey, Lea County, New Mexico, 1974, U.S.D.A., Soil Conservation Survey). Runoff is not expected fro the facility. Water would be expected to collect in a low depression in the center of the facility.

13 ADDITIONAL INFORMATION

Closure Plan

Should Southern Union Gas Services, LTD choose to permanently close the WEST EUNICE Compressor Station, all reasonable and necessary measures will be taken to prevent the exceedance of 20 NMAC 6.2.3103 quality standards. Closure measures will include removal or closure in place of all underground piping and equipment. All tanks will be emptied. No potentially toxic materials or effluents will remain on the site. All potential sources of toxic pollutants will be inspected. Should contaminated soil be discovered, any necessary reporting under NMOCD Rule 113 and 20 NMAC 3.2.1203 will be make, and clean-up activities will commence. Post-closure maintenance and monitoring plans would not be necessary unless contamination is encountered.

Material Safety Data Sheet

Chevron HDAX LFG Gas Engine Oil

MSDS: 7046 Revision #: 2 Revision Date: 06/06/00

Click Product Test Data to search database.

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON HDAX Low Ash Gas Engine Oil and HDAX LFG

PRODUCT NUMBER(S): CPS232325 CPS232327 CPS232328 CPS232331
SYNONYM: CHEVRON HDAX Low Ash Gas Engine Oil SAE 15W-40
CHEVRON HDAX Low Ash Gas Engine Oil SAE 30
CHEVRON HDAX Low Ash Gas Engine Oil SAE 40
CHEVRON HDAX LFG Gas Engine Oil SAE 40

COMPANY IDENTIFICATION	EMERGENCY TELEPHONE NUMBERS
Chevron Products Company Lubricants and Specialty Products 6001 Bollinger Canyon Rd., T3325/B10 San Ramon, CA 94583 www.chevron-lubricants.com	HEALTH (24 hr): (800)231-0623 or (510)231-0623 (International) TRANSPORTATION (24 hr): CHEMTREC (800)424-9300 or (703)527-3887 Emergency Information Centers are located in U.S.A. Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Request:(800)414-6737 email:lubemsds@chevron.com
Environmental, Safety, & Health Info: (925) 842-5535
Product Information: (800) 582-3835

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2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON HDAX Low Ash Gas Engine Oil and HDAX LFG

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
LUBRICATING BASE OIL SEVERELY REFINED PETROLEUM DISTILLATE	> 80.00%	5 mg/m3 (mist) 10 mg/m3 (mist) 5 mg/m3 (mist)	ACGIH TWA ACGIH STEL OSHA PEL

The BASE OIL may be a mixture of any of the following: CAS 64741884, CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525, CAS 64742536, CAS 64742547, CAS 64742627, CAS 64742650, or CAS 72623837.

ADDITIVES INCLUDING THE FOLLOWING < 20.00%

ZINC ALKARYL DITHIOPHOSPHATE
Chemical Name: ZINC ALKARYL DITHIOPHOSPHATE
CAS54261675 < 0.50% NONE NA

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m3, the OSHA PEL is 5 mg/m3.

3. HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS
EYE:
Not expected to cause prolonged or significant eye irritation.
SKIN:
Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.
INGESTION:
Not expected to be harmful if swallowed.
INHALATION:
Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

4. FIRST AID MEASURES

EYE:
No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.
SKIN:
No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.
INGESTION:
No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.
INHALATION:
If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:
Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

FLAMMABLE PROPERTIES:
FLASH POINT: (COC) 399F (204C) min.
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NA Upper: NA
EXTINGUISHING MEDIA:
CO2, Dry Chemical, Foam, Water Fog
NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.
FIRE FIGHTING INSTRUCTIONS:
This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor and may produce oxides of Ca, P, N, S, Mo, Zn. Incomplete combustion can produce carbon monoxide.

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6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887
International Collect Calls Accepted
ACCIDENTAL RELEASE MEASURES:
Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

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7. HANDLING AND STORAGE

Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS

Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION:
No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.
SKIN PROTECTION:
No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield> <4H>
RESPIRATORY PROTECTION:
No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: particulate.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:
Dark amber liquid.

pH:	NDA
VAPOR PRESSURE:	NA
VAPOR DENSITY (AIR=1):	NA
BOILING POINT:	NDA
FREEZING POINT:	NDA
MELTING POINT:	NA
SOLUBILITY:	Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.87 - 0.88 @ 15.6/15.6C
EVAPORATION RATE:	NA
VISCOSITY:	11.0 - 14.4 cSt @ 100C (min.)
PERCENT VOLATILE (VOL):	NA

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10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
H_2S may be released at high temperatures.
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
No data available.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.

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11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

The eye irritation hazard is based on an evaluation of the data for the components.
SKIN EFFECTS:
The skin irritation hazard is based on an evaluation of the data for the components.
ACUTE ORAL EFFECTS:
The acute oral toxicity is based on an evaluation of the data for the components.
ACUTE INHALATION EFFECTS:
The acute respiratory toxicity is based on an evaluation of the data for the components.
ADDITIONAL TOXICOLOGY INFORMATION:
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

This product contains zinc alkaryl dithiophosphate which is similar in toxicity to zinc alkyl dithiophosphate (ZDDP). Several (ZDDPs) have been reported to have weak mutagenic activity in cultured mammalian cells but only at concentrations that were toxic to the test cells. We do not believe that there is any mutagenic risk to workers exposed to ZDDPs.

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water. See Chevron Material Safety Data Sheet No. 1793 for additional information on used motor oil.

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12. ECOLOGICAL INFORMATION

ECOTOXICITY:
The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.
ENVIRONMENTAL FATE:
This material is not expected to be readily biodegradable.

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13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

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14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations.

Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: NONE
DOT HAZARD CLASS: NONE
DOT IDENTIFICATION NUMBER: NONE
DOT PACKING GROUP: N/A
ADDITIONAL INFO: Petroleum Lubricating Oil - Not Hazardous by U.S. DOT.
ADR/RID Hazard class - Not applicable.

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15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Chevron STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

ZINC ALKARYL DITHIOPHOSPHATE
is found on lists: 01,11,
SEVERELY REFINED PETROLEUM DISTILLATE
is found on lists: 14,15,17,

EU RISK AND SAFETY LABEL PHRASES:
R53: May cause long-term adverse effects in the aquatic environment.
NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34;5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL
New Jersey Right-To-Know trade secret registry number 01154100-5031P
New Jersey Right-To-Know trade secret registry number 01154100-5063P
WHMIS CLASSIFICATION:
This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

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16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or

published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:
This revision updates Sections 1, 2, 5, 9, 12, and 15.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed
NDA - No Data Available	NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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Material Safety Data Sheet

Chevron HDAX NG Screw Compressor Oil

MSDS: 6852 Revision #: 2 Revision Date: 10/17/00

Click Product Test Data to search database.

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON HDAX NG Screw Compressor Oil

PRODUCT NUMBER(S): CPS255204 CPS255205
SYNONYM: CHEVRON HDAX NG Screw Compressor Oil ISO 150
CHEVRON HDAX NG Screw Compressor Oil ISO 68

COMPANY IDENTIFICATION	EMERGENCY TELEPHONE NUMBERS
Chevron Products Company Lubricants and Specialty Products 6001 Bollinger Canyon Rd., T3325/B10 San Ramon, CA 94583 www.chevron-lubricants.com	HEALTH (24 hr): (800)231-0623 or (510)231-0623 (International) TRANSPORTATION (24 hr): CHEMTREC (800)424-9300 or (703)527-3887 Emergency Information Centers are located in U.S.A. Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Request:(800)414-6737 email:lubemsds@chevron.com
Environmental, Safety, & Health Info: (925) 842-5535
Product Information: (800) 582-3835

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2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON HDAX NG Screw Compressor Oil

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
HYDROTREATED DIST., HVY PARA Chemical Name: DISTILLATES, HYDROTREATED HEAVY PARAFFINIC CAS64742547	> 80.00%	5 mg/m3 (mist) 10 mg/m3 (mist) 5 mg/m3 (mist)	ACGIH TWA ACGIH STEL OSHA PEL
ADDITIVES	< 20.00%		

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m3, the OSHA PEL is 5 mg/m3.

3. HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS
EYE:
Not expected to cause prolonged or significant eye irritation.
SKIN:
Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.
INGESTION:
Not expected to be harmful if swallowed.
INHALATION:
Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

4. FIRST AID MEASURES

EYE:
No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.
SKIN:
No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.
INGESTION:
No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.
INHALATION:
If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:
Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.
FLAMMABLE PROPERTIES:
FLASH POINT: (COC) 419F (215C) Min.
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NA Upper: NA
EXTINGUISHING MEDIA:
CO2, Dry Chemical, Foam, Water Fog
NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.
FIRE FIGHTING INSTRUCTIONS:
This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space

without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor and may produce oxides of nitrogen and phosphorus. Incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887
International Collect Calls Accepted
ACCIDENTAL RELEASE MEASURES:
Stop the source of the leak or release. Clean up releases as soon as possible. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

7. HANDLING AND STORAGE

Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS
Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION:
No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.
SKIN PROTECTION:
No special protective clothing is normally required. Where splashing is

possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield> <4H>
RESPIRATORY PROTECTION:
No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: particulate.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:
Liquid.

pH:	NA
VAPOR PRESSURE:	NA
VAPOR DENSITY (AIR=1):	NA
BOILING POINT:	NDA
FREEZING POINT:	NDA
MELTING POINT:	NA
SOLUBILITY:	Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.87 - 0.88 @ 15.6/15.6/C
EVAPORATION RATE:	NA
VISCOSITY:	61.2 - 135 cSt @ 40C (Min.)
PERCENT VOLATILE (VOL):	NA

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10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
No data available.
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
No data available.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.

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11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
The eye irritation hazard is based on data for a similar material.
SKIN EFFECTS:
The skin irritation hazard is based on data for a similar material.
ACUTE ORAL EFFECTS:
The acute oral toxicity is based on data for a similar material.
ACUTE INHALATION EFFECTS:
The acute respiratory toxicity is based on data for a similar material.
ADDITIONAL TOXICOLOGY INFORMATION:
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under

the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION

ECOTOXICITY:
The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.
ENVIRONMENTAL FATE:
This material is not expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: NONE
DOT HAZARD CLASS: NONE
DOT IDENTIFICATION NUMBER: NONE
DOT PACKING GROUP: N/A
ADDITIONAL INFO: Petroleum Lubricating Oil - Not Hazardous by U.S. DOT.
ADR/RID Hazard class - Not applicable.

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)

07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Chevron STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

DISTILLATES, HYDROTREATED HEAVY PARAFFINIC
is found on lists: 14,15,17,

EU RISK AND SAFETY LABEL PHRASES:
R53: May cause long-term adverse effects in the aquatic environment.
NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL
WHMIS CLASSIFICATION:
This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

---

16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:
This revision updates Sections 1, 5, 8, 9, 12, and 15.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed
NDA - No Data Available	NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON HDAX NG Screw Compressor Oil

PRODUCT NUMBER(S): CPS255204 CPS255205 CPS259135
SYNONYM: CHEVRON HDAX NG Screw Compressor Oil ISO 100
CHEVRON HDAX NG Screw Compressor Oil ISO 150
CHEVRON HDAX NG Screw Compressor Oil ISO 68

COMPANY IDENTIFICATION

Chevron Products Company
Lubricants and Specialty Products
6001 Bollinger Canyon Rd., T3325/B10
San Ramon, CA 94583
www.chevron-lubricants.com

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800)231-0623 or
(510)231-0623 (International)
TRANSPORTATION (24 hr): CHEMTREC
(800)424-9300 or (703)527-3887
Emergency Information Centers
are located in U.S.A.
Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Request:(800)414-6737 email:lubemsds@chevron.com
Environmental, Safety, & Health Info: (925) 842-5535
Product Information: (800) 582-3835

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON HDAX NG Screw Compressor Oil

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
HYDROTREATED DIST., HVY PARA			
Chemical Name: DISTILLATES, HYDROTREATED HEAVY PARAFFINIC			
CAS64742547	> 80.00%	5 mg/m3 (mist)	ACGIH TWA
		10 mg/m3 (mist)	ACGIH STEL
		5 mg/m3 (mist)	OSHA PEL
ADDITIVES	< 20.00%		

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m3, the OSHA PEL is 5 mg/m3.

3. HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS
EYE:
Not expected to cause prolonged or significant eye irritation.
SKIN:

Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.
INGESTION:
Not expected to be harmful if swallowed.
INHALATION:
Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

4. FIRST AID MEASURES

EYE:
No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.
SKIN:
No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.
INGESTION:
No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.
INHALATION:
If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:
Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.
FLAMMABLE PROPERTIES:
FLASH POINT: (COC) 419F (215C) Min.
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NA Upper: NA
EXTINGUISHING MEDIA:
CO2, Dry Chemical, Foam, Water Fog
NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.
FIRE FIGHTING INSTRUCTIONS:
This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor and may produce oxides of nitrogen and phosphorus. Incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887
International Collect Calls Accepted
ACCIDENTAL RELEASE MEASURES:
Stop the source of the leak or release. Clean up releases as soon as possible. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

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7. HANDLING AND STORAGE

Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner, or properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS
Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION:
No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.
SKIN PROTECTION:
No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield> <4H>
RESPIRATORY PROTECTION:
No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: particulate.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:
Liquid.

pH:	NA
VAPOR PRESSURE:	NA
VAPOR DENSITY (AIR=1):	NA
BOILING POINT:	NDA
FREEZING POINT:	NDA
MELTING POINT:	NA
SOLUBILITY:	Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.87 - 0.88 @ 15.6/15.6/C
EVAPORATION RATE:	NA
VISCOSITY:	61.2 - 135 cSt @ 40C (Min.)
PERCENT VOLATILE (VOL):	NA

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
No data available.
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
No data available.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
The eye irritation hazard is based on data for a similar material.
SKIN EFFECTS:
The skin irritation hazard is based on data for a similar material.
ACUTE ORAL EFFECTS:
The acute oral toxicity is based on data for a similar material.
ACUTE INHALATION EFFECTS:
The acute respiratory toxicity is based on data for a similar material.
ADDITIONAL TOXICOLOGY INFORMATION:
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION

ECOTOXICITY:
The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.
ENVIRONMENTAL FATE:
This material is not expected to be readily biodegradable.

---

13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

---

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: NONE
DOT HAZARD CLASS: NONE
DOT IDENTIFICATION NUMBER: NONE
DOT PACKING GROUP: N/A
ADDITIONAL INFO: Petroleum Lubricating Oil - Not Hazardous by U.S. DOT.
ADR/RID Hazard class - Not applicable.

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15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Chevron STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

DISTILLATES, HYDROTREATED HEAVY PARAFFINIC
is found on lists: 14,15,17,

EU RISK AND SAFETY LABEL PHRASES:
R53: May cause long-term adverse effects in the aquatic environment.
NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL
WHMIS CLASSIFICATION:
This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

---

16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:
Changes have been made in Section 1 (Chemical Product and Company Id.).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed
NDA - No Data Available	NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

****

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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THIS IS THE LAST PAGE OF THIS MSDS

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Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

mon Name	Coastalguard 50%
ıpplier	COASTAL CHEMICAL CO.,L.L.C. 3520 Veterans Memorial Drive ABBEVILLE, LA 70510 318-893-3862
onym	Not available.
de name	Not available.
laterial Uses	Industrial applications: Coolant and antifreeze.
ıufacturer	Coastal Chemical Co., Inc. 3520 Veterans Memorial Drive Abbeville, La.

Code	37172
MSDS#	Not available.
Validation Date	1/9/97
Print Date	7/13/99

In case of Emergency: Transportation Emergency Call CHEMTREC 800-424-9300 Other Information Call Joe Hudman 713-477-6675

ection 2. Composition and Information on Ingredients

me	CAS #	% by Weight	TLV/PEL	LC_{50}/LD_{50}
ylene Glycol	107-21-1	50	CEIL: 39.4 (ppm) CEIL: 100 (mg/m^3)	ORAL (LD50): Acute: 4700 mg/kg [Rat]. DERMAL (LD50): Acute: 9530 mg/kg [Rabbit.].

ection 3. Hazards Identification

rgency Overview

CAUTION!

HARMFUL IF INHALED. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. Repeated or prolonged exposure to the substance can produce kidney damage.

tes of Entry

Ingestion.

ntial Acute Health Effects

Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation. This product may irritate eyes and skin upon contact.

ential Chronic Health ects

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS : Not available. The substance is toxic to kidneys, the nervous system, the reproductive system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

e Contact

IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.

...n Contact

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

ardous Skin Contact

No additional information.

alation

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

ardous Inhalation

No additional information.

estion

DO NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

Continued on Next Page

Hazardous Ingestion	DO NOT Induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	The lowest known value is 398°C (748.4°F) (Ethylene Glycol).
Flash Points	The lowest known value is CLOSED CUP: 116°C (240.8°F) OPEN CUP: 232°C (240.8°F) (Cleveland) (Ethylene Glycol)
Flammable Limits	The greatest known range is LOWER: 3.2% UPPER: 15.3% (Ethylene Glycol)
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Very slightly to slightly flammable in presence of open flames and sparks, of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	When heated to decomposition, it emits acrid smoke and irritating fumes. (Ethylene Glycol)
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling	Not available.
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engeneering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Safety glasses. Lab coat. Gloves (impervious). Wear appropriate respirator when ventilation is inadequate.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
1,2-Ethanediol	107-21-1	CEIL: 39.4 (ppm) CEIL: 100 (mg/m³)

Continued on Next Page

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.
Molecular Weight	Not applicable.
pH (1% soln/water)	Neutral.
Boiling Point	The lowest known value is 198°C (388.4°F) (Ethylene Glycol).
Melting Point/Pour Point	May start to solidify at -13.5°C (7.7°F) based on data for: Ethylene Glycol.
Critical Temperature	Not available.
Specific Gravity	1.06 (Water = 1)
Vapor Pressure	The highest known value is 0.05 mm of Hg (@ 20°C) (Ethylene Glycol).
Vapor Density	The highest known value is 2.1 (Air = 1) (Ethylene Glycol).
Volatility	Not available.
Odor Threshold	Not available.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Very slightly soluble in n-octanol.
Physical Chemical Comments	Not available.

Odor	Not available.
Taste	Not available.
Color	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	Slightly reactive to reactive with oxidizing agents, alkalis.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 4700 mg/kg (Rat) Acute dermal toxicity (LD50): > 5000 mg/kg (Rabbit.)
Chronic Effects on Humans	The substance is toxic to kidneys, the nervous system, the reproductive system, liver.
Other Toxic Effects on Humans	Very dangerous in case of ingestion. Very slightly to slightly dangerous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of inhalation.
Special Remarks on Toxicity to Animals	Toxic for humans or animal life. (Ethylene Glycol)
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on other Toxic Effects on Humans	Exposure can cause nausea, headache and vomiting. (Ethylene Glycol)

Continued on Next Page

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

Proper Shipping Name	Drums - Not Regulated Bulk (> 1000 gals.) - Regulated Other Regulated Substances, liquid, n.o.s. (Ethylene Glycol)
DOT Classification	DOT CLASS 9: Miscellaneous hazardous material.
DOT Identification Number	NA3082
Packing Group	III
Hazardous Substances Reportable Quantity (kg)	4535.9
Special Provisions for Transport	No additional remark.

Section 15. Regulatory Information

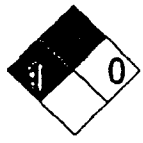
Federal and State Regulations	The following product(s) is (are) listed on SARA 313: , Ethylene Glycol The following product(s) is (are) listed by the State of Massachusetts: Ethylene Glycol The following product(s) is (are) listed on TSCA: Ethylene Glycol	
Other Classifications	WHMIS (Canada)	WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
	DSCL (EEC)	Not controlled under DSCL (Europe).

Section 16. Other Information

HMIS (U.S.A.)

Health Hazard *	2
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)



References: Not available.

Other Special Considerations: No additional remark.

Validated by Joe Hudman on 1/9/97.

Verified by Joe Hudman.

Printed 7/13/99.

Continued on Next Page

Transportation Emergency Call
CHEMTREC 800-424-9300
ther Information Call
: Hudman
713-477-6675

tice to Reader

e best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained in. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that are the only hazards that exist.

SOUTHERN UNION GAS SERVICES, LTD.
STANDARD OPERATING PROCEDURE

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

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SCOPE

This procedure provides the guidelines necessary to properly notify the State of New Mexico in the event of a Spill, Leak or Release of Hydrocarbon Liquids, Produced Water or Natural Gas.

RESPONSIBILITY

Each employee involved in field and plant operations and his/her supervisor are responsible for the requirements of this procedure.

DEFINITIONS

Immediate notification - Notification to the State District office by phone or in person as soon as possible but no later than 24 hours of initial discovery. Followed by a written notification within 15 days of initial discovery

Subsequent notification - Notification to the appropriate State District office by written report within 15 days of discovery. The State of New Mexico **Form C-141** (attached) must be used for all written notifications.

Major Release - Requires verbal notification within 24 hours of discovery, followed by a written notification within 15 days of initial discovery.

Minor Release - Requires written notification only within 15 days of initial discovery.

Spill, leak or release - An incident where crude oil, produced water or natural gas is discharged and contaminates either a water, soil, or air.

Hydrocarbon Liquid - Crude oil associated with the exploration and production, including transportation, of oil or gas.

Watercourse - Any lake bed or gully, draw, stream bed, wash, arroyo, or natural or manmade channel through which water flows or has flowed.

Reporting Requirements - The notification of releases shall be made by the person operating or controlling either the release or the location of the release.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

INITIAL RESPONSE TO A SPILL, LEAK OR RELEASE

STEP 1: Evaluate the potential hazard to the general public. Take appropriate action.

STEP 2: Eliminate or restrict the source of the spill, leak or release by whatever safe and reasonable means available.

STEP 3: Contain the spill, leak or release to minimize the area of exposure. This may be accomplished by the use of dikes, berms or absorbent materials such as tubes, pads, hay, etc..

STEP 4: Remove as much standing liquid (free oil) as possible by any reasonable method.

INTER-COMPANY REPORTING REQUIREMENTS

Any spill, leak or release of hydrocarbon liquid, produced water or natural gas that requires State notification or effects any watercourse will be reported to the Area Manager and/or the Area EH&S Coordinator immediately.

NEW MEXICO REPORTING REQUIREMENTS

Immediate Notification (Major release)

Any amount of hydrocarbon liquid into a watercourse.
>25 bbls. of hydrocarbon liquid on the ground.
>25 bbls. of produced water into a watercourse.
>25 bbls. of produced water on the ground.
>500 mcf of natural gas
or an unauthorized release of any volume (oil, water or gas) that :
1) results in a fire;
2) will reach a watercourse;
3) may (w/ reasonable probability) endanger public health
4) results in substantial damage to property or the environment.

Subsequent Notification (Minor release)

>5 bbls. but <25 bbls. of hydrocarbon liquid on the ground.
>5 bbls. but <25 bbls. of produced water on the ground or in a watercourse.
>50 mcf but <500 mcf of natural gas.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

NEW MEXICO REMEDIATION REQUIREMENTS

Soil must be remediated if :

TPH	>5000 ppm
BTEX	>50 ppm
Benzene	>10 ppm

In circumstances where the contaminated soil is :

<100 ft. above the water table
<1000 ft. from a water well
<1000 ft. from a surface water body

Remediation levels may be lower in these cases and the Area EH&S Coordinator should be consulted as to the extent of remediation required.

REMEDIATION PROCEDURES

STEP 1: Where the spill, leak or release is from a gathering pipeline the pipe should be excavated in a manner that allows for some blending with uncontaminated soil upon backfilling.

STEP 2: Sample the contaminated soil for the required components using a representative composite sample. Depending on the size contaminated area, a typical composite sample would be one with equal parts of soil from the four "corners" and one part from the center of the contaminated area.

STEP 3: Determine the type of remediation to be used i.e., natural remediation, soil blending, land farming, enhanced bio-remediation, thermal disorbtion etc.. For significant spills, leaks or releases contact Area EH&S Coordinator for recommendations or assistance in making this determination.

STEP 4: Monitor the remediation process to see that it is progressing. This could entail further sampling, watering, aerating or tilling.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

PREVENTIVE MEASURES

Certain steps should be taken to prevent the occurrence of a spill, leak or release:

(1) The integrity of equipment should be monitored and maintained.

(2) Containment's, that would prevent any contact with the soil of liquids that cause contamination, should be used when possible.

(3) Gathering systems should be kept free of liquids where possible at pigging facilities, drips and siphons.

(4) Equipment near watercourses should be of particular concern.

(5) Past experience should be used in determining the need for other preventive measures.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

Attachment A

Contaminated Soils Ranking Criteria

- Depth to Ground Water

< 50 feet	20
50-99 feet	10
>100 feet	0

- Wellhead Protection Area
  <1000 feet from a water source, or
  <200 feet from a private domestic water source

YES	20
NO	0

- Distance to Surface Water

<200 horizontal feet	20
200-1000 horizontal feet	10
>1000 horizontal feet	0

A = _____
B = _____
C = _____
Total = _____

Total Ranking is as follows:

	Level I >19	Level II 10-19	Level II 0-9
Benzene (PPM)	10	10	10
BTEX (PPB)	50	50	50
TPH (PPM)	100	1000	5000

SOUTHERN UNION GAS SERVICES, LTD.
STANDARD OPERATING PROCEDURE

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

Attachment B

Leak, Spill or Release Report

Facility_____ Person Filing Report _____
Report Date ____/____/_____ Time of Filing ___:_____ AM / PM

Responsible Party: Southern Union Gas Services
Facility address: _____
City: _____ State: NM ☐ TX ☐ Zip Code: _____
Telephone: ____-_____-_____ Fax: ____-_____-_____

Discharge Date: ___/___/_____ Time: __:____ AM / PM
Duration of Discharge: ___ Hr. ____ Min. Quantity Discharged: _____ Gal. / Lbs.
Source and/or Cause of Discharge: _____
Type of Discharge: ☐ Gas ☐Crude Oil ☐Condensate ☐Saltwater ☐ Other
If other, explain by noting the chemical composition and physical characteristics on the reverse side of this page or attach the MSDS.

Location: ¼ ___ ¼ ___ Section____Township____Range ____Survey____Block ____

Distance from the nearest town, community or landmark: _____

Site characteristics are as follows:

- Precipitation during the release prior to remediation: _____
- Wind Conditions and Direction: _____
- Temperature:_____
- Soil Type: _____
- Depth of Penetration: _____
- Area of Delineation: _____
- Nearest Residence: _____
- Nearest *Fresh Water: _____

*Any water well or watercourse, i.e., river, lake, stream, playa, arroyo, draw, wash, gully, natural or man-made channel.

Attach a copy of the chronological record of all federal, state and local agencies notified in reference to this report. Always indicate the name of the person who receives the call and the time the call was made for each agency.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

ATTACHMENT C

DEFINITIONS

Unsaturated/Contaminated Soil
Soils, which are not highly contaminated/saturated, but contain Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) and Total Petroleum Hydrocarbons (TPH) or other potential fresh water contaminants.

Saturated/Highly Contaminated
Those soils that contain a free liquid phase or exhibit gross staining.

Watercourse
Any lakebed or gully, draw, streambed, wash, arroyos, or natural or man-made channel through which water flows or has flowed.

Immediate Notification
Shall be as soon as possible after discovery and shall be in person or by telephone to the district office of the Division in which the incident occurred. If incident occurs after normal business hours, notify the District Supervisor, the Oil & Gas Inspector, or the Deputy Oil & Gas Inspector. Follow up with a completed written report within ten (10) days of the incident.

Subsequent Notification
A complete written report of the incident within ten (10) days of the discovery of the incident.

Written Report
Complete written reports will be submitted in DUPLICATE to the district office of the OCD in the district in which the incident occurred within ten (10) days after discovery of the incident.

Content of Notification
Refer to Attachment B.

SOUTHERN UNION GAS SERVICES, LTD.
STANDARD OPERATING PROCEDURE

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

SCOPE

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Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

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>25 bbls. of produced water into a watercourse.
>25 bbls. of produced water on the ground.
>500 mcf of natural gas
or an unauthorized release of any volume (oil, water or gas) that :
1) results in a fire;
2) will reach a watercourse;
3) may (w/ reasonable probability) endanger public health
4) results in substantial damage to property or the environment.

Subsequent Notification (Minor release)

>5 bbls. but <25 bbls. of hydrocarbon liquid on the ground.
>5 bbls. but <25 bbls. of produced water on the ground or in a watercourse.
>50 mcf but <500 mcf of natural gas.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

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TPH	>5000 ppm
BTEX	>50 ppm
Benzene	>10 ppm

In circumstances where the contaminated soil is :

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<1000 ft. from a water well
<1000 ft. from a surface water body

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STEP 1: Where the spill, leak or release is from a gathering pipeline the pipe should be excavated in a manner that allows for some blending with uncontaminated soil upon backfilling.

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STEP 3: Determine the type of remediation to be used i.e., natural remediation, soil blending, land farming, enhanced bio-remediation, thermal disorbtion etc.. For significant spills, leaks or releases contact Area EH&S Coordinator for recommendations or assistance in making this determination.

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Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

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(1) The integrity of equipment should be monitored and maintained.

(2) Containment's, that would prevent any contact with the soil of liquids that cause contamination, should be used when possible.

(3) Gathering systems should be kept free of liquids where possible at pigging facilities, drips and siphons.

(4) Equipment near watercourses should be of particular concern.

(5) Past experience should be used in determining the need for other preventive measures.

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50-99 feet	10
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- Wellhead Protection Area
  <1000 feet from a water source, or
  <200 feet from a private domestic water source

YES	20
NO	0

- Distance to Surface Water

<200 horizontal feet	20
200-1000 horizontal feet	10
>1000 horizontal feet	0

A = _____
B = _____
C = _____
Total = _____

Total Ranking is as follows:

	Level I >19	Level II 10-19	Level II 0-9
Benzene (PPM)	10	10	10
BTEX (PPB)	50	50	50
TPH (PPM)	100	1000	5000

SOUTHERN UNION GAS SERVICES, LTD.
STANDARD OPERATING PROCEDURE

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

Attachment B

Leak, Spill or Release Report

Facility_____ Person Filing Report _____
Report Date ___/___/_____ Time of Filing ___:_____ AM / PM

Responsible Party: Southern Union Gas Services
Facility address: _____
City: _____ State: NM ☐ TX ☐ Zip Code: _____
Telephone: ____-_____-_____ Fax: ____-_____-_____

Discharge Date: ___/___/_____ Time: __:____ AM / PM
Duration of Discharge: ___ Hr. ____ Min. Quantity Discharged: _____ Gal. / Lbs.
Source and/or Cause of Discharge: _____
Type of Discharge: ☐ Gas ☐ Crude Oil ☐ Condensate ☐ Saltwater ☐ Other
If other, explain by noting the chemical composition and physical characteristics on the reverse side of this page or attach the MSDS.

Location: ¼ ___ ¼ ___ Section____Township____Range ____Survey____Block ____

Distance from the nearest town, community or landmark: _____

Site characteristics are as follows:

- Precipitation during the release prior to remediation: _____
- Wind Conditions and Direction: _____
- Temperature:_____
- Soil Type: _____
- Depth of Penetration: _____
- Area of Delineation: _____
- Nearest Residence: _____
- Nearest *Fresh Water: _____

*Any water well or watercourse, i.e., river, lake, stream, playa, arroyo, draw, wash, gully, natural or man-made channel.

Attach a copy of the chronological record of all federal, state and local agencies notified in reference to this report. Always indicate the name of the person who receives the call and the time the call was made for each agency.

Subject: Guidelines for Notification of Spills, Leaks, Releases of Hydrocarbon Liquids, Produced Water or Natural Gas

ATTACHMENT C

DEFINITIONS

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Saturated/Highly Contaminated
Those soils that contain a free liquid phase or exhibit gross staining.

Watercourse
Any lakebed or gully, draw, streambed, wash, arroyos, or natural or man-made channel through which water flows or has flowed.

Immediate Notification
Shall be as soon as possible after discovery and shall be in person or by telephone to the district office of the Division in which the incident occurred. If incident occurs after normal business hours, notify the District Supervisor, the Oil & Gas Inspector, or the Deputy Oil & Gas Inspector. Follow up with a completed written report within ten (10) days of the incident.

Subsequent Notification
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Written Report
Complete written reports will be submitted in DUPLICATE to the district office of the OCD in the district in which the incident occurred within ten (10) days after discovery of the incident.

Content of Notification
Refer to Attachment B.

TITLE 19 NATURAL RESOURCES & WILDLIFE
CHAPTER 15 OIL AND GAS
PART 3 DRILLING

19.15.3.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, (505) 827-7131.
[2-1-96; 19.15.3.1 NMAC - Rn, 19 NMAC 15.C.1, 11-15-01]

19.15.3.2 SCOPE: All persons/entities engaged in oil and gas development and production within New Mexico.
[2-1-96; 19.15.3.2 NMAC - Rn, 19 NMAC 15.C.2, 11-15-01]

19.15.3.3 STATUTORY AUTHORITY: Sections 70-2-1 through 70-2-38 NMSA 1978 sets forth the Oil and Gas Act which grants the Oil Conservation Division jurisdiction and authority over all matters relating to the conservation of oil and gas, the prevention of waste of oil and gas and of potash as a result of oil and gas operations, the protection of correlative rights, and the disposition of wastes resulting from oil and gas operations.
[2-1-96; 19.15.3.3 NMAC - Rn, 19 NMAC 15.C.3, 11-15-01]

19.15.3.4 DURATION: Permanent.
[2-1-96; 19.15.3.4 NMAC - Rn, 19 NMAC 15.C.4, 11-15-01]

19.15.3.5 EFFECTIVE DATE: February 1, 1996.
[2-1-96; 19.15.3.5 NMAC - Rn, 19 NMAC 15.C.5, 11-15-01]

19.15.3.6 OBJECTIVE: To regulate the drilling of oil and gas wells within the State of New Mexico to enable the Oil Conservation Division to fulfill its statutory mandates under the Oil & Gas Act.
[2-1-96; 19.15.3.6 NMAC - Rn, 19 NMAC 15.C.6, 11-15-01]

19.15.3.7 DEFINITIONS: [Reserved].

19.15.3.8-99 [RESERVED]

19.15.3.100 OPERATOR REGISTRATION; CHANGE OF OPERATOR; CHANGE OF NAME:

A. Prior to commencing operations, every operator of a well or wells in New Mexico shall register with the division as an operator. Applicants shall provide the following to the financial assurance administrator in the division's Santa Fe office:

(1) an oil and gas registration identification (OGRID) number obtained from the division, the state land office or the taxation and revenue department;

(2) a current address of record to be used for notice, and a current emergency contact name and telephone number for each district in which the operator operates wells; and

(3) the financial assurance required by 19.15.3.101 NMAC.

B. The division may deny registration as a well operator if:

(1) the applicant is not in compliance with Subsection A of 19.15.1.40 NMAC;

(2) an officer, director, partner in the applicant or person with an interest in the applicant exceeding 25 percent, is or was within the past five years an officer, director, partner or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.1.40 NMAC;

(3) the applicant is or was within the past five years an officer, director, partner or person with an interest exceeding 25 percent in another entity that is not currently in compliance with Subsection A of 19.15.1.40 NMAC;

(4) the applicant is a corporation or limited liability company, and is not registered with the public regulation commission to do business in New Mexico; or

(5) the applicant is a limited partnership, and is not registered with the New Mexico secretary of state to do business in New Mexico.

C. Operators shall keep the division informed of their current address of record and emergency contact names and telephone numbers by submitting changes in writing to the division's financial assurance

administrator in the division's Santa Fe office within 30 days of the change.

D. The division may require an operator or applicant to identify its current and past officers, directors and partners, and its current and past ownership interest in other operators.

E. Change of operator.

(1) A change of operator occurs when the entity responsible for a well or a group of wells changes. A change of operator may result from a sale, assignment by a court, a change in operating agreement or other transaction. Under a change of operator, wells are moved from the OGRID number of the operator of record with the division to the new operator's OGRID number.

(2) The operator of record with the division and the new operator shall apply for a change of operator by jointly filing a form C-145 using the division's web-based online application. If the operator of record with the division is unavailable, the new operator shall apply to the division for approval of change of operator without a joint application. The operator shall make such application in writing, and provide documentary evidence of the applicant's right to assume operations. The new operator may not commence operations until the division approves the application for change of operator.

(3) The division director or his designee may deny a change of operator if:

(a) the new operator is not in compliance with Subsection A of 19.15.1.40 NMAC; or

(b) the new operator is acquiring wells, facilities or sites subject to a compliance order requiring remediation or abatement of contamination, or compliance with 19.15.3.201 NMAC, and the new operator has not entered into an agreed compliance order setting a schedule for compliance with the existing order.

(4) In determining whether to grant or deny a change of operator when the new operator is not in compliance with Subsection A of 19.15.1.40 NMAC, the division director or his designee shall consider such factors as whether the non-compliance with Subsection A of 19.15.1.40 NMAC is caused by the operator not meeting the financial assurance requirements of 19.15.3.101 NMAC, being subject to a division or commission order finding the operator to be in violation of an order requiring corrective action, having a penalty assessment that has been unpaid for more than 70 days since the issuance of the order assessing the penalty or having more than the allowed number of wells out of compliance with 19.15.4.201 NMAC. If the non-compliance is caused by the operator having more than the allowed number of wells not in compliance with 19.15.4.201 NMAC, the division director or his designee shall consider the number of wells not in compliance, the length of time the wells have been out of compliance and the operator's efforts to bring the wells into compliance.

F. Change of name.

(1) A change of operator name occurs when the name of the entity responsible for a well or wells changes but the entity does not change. For a change of name, the OGRID number remains the same but division records are changed to reflect the new operator name.

(2) An operator shall apply for a change of name by filing a form C-146 using the division's web-based online application and supplying documentary proof that the change is a name change and not a change of operator. If the operator is a corporation, limited liability company or limited partnership, the name must be registered with the public regulation commission or the New Mexico secretary of state, as applicable. The division shall not approve a change of name until the state land office and the taxation and revenue department have cleared the change of name on the OGRID.

G. Examples of change of operator and change of name.

(1) Mr. Smith, a sole proprietor, operates five wells under the name "Smith oil company". Mr. Smith changes the name of his company to "Smith production company". The name of the entity operating the wells has changed, but the entity has not changed. Mr. Smith should apply for a change of name.

(2) Mr. Smith incorporates his business, changing from the sole proprietorship, "Smith production company", to a corporation: "Smith production company, inc.". The entity responsible for the wells has changed, and Mr. Smith and "Smith production company, inc." should apply for a change of operator.

(3) Smith production company, inc., a New Mexico operator, merges with XYZ, inc., which does not operate in New Mexico. At the surviving entity's election, this transaction may be treated as a change of name from Smith production company, to XYZ, inc., maintaining the existing OGRID, or as a change of operator, with a new OGRID.

(4) Two New Mexico operators, Smith production company, inc. and Jones production company, inc., merge. The surviving corporation is Jones production company, inc. A different entity now operates the wells Smith production company, formerly operated, and the wells must be placed under that entity's OGRID. Jones production company, inc. and Smith production company, inc. should apply for a change of operator as to the wells Smith production company, inc. operated.

[19.15.3.100 NMAC - N, 12/15/05]

19.15.3.101 FINANCIAL ASSURANCE FOR WELL PLUGGING:

A. Any person, firm, corporation or association who has drilled or acquired, is drilling or proposes to drill or acquire any oil, gas or injection or other service well on privately owned or state owned lands within this state shall furnish a financial assurance acceptable to the division in the form of an irrevocable letter of credit or cash or surety bond running to the state of New Mexico conditioned that the well be plugged and abandoned and the location restored and remediated in compliance with division rules.

B. The division accepts two forms of financial assurance: a one-well financial assurance that covers a single well and a blanket financial assurance that covers multiple wells. Any well that has been in temporary abandonment for more than two years must be covered by a one-well financial assurance, except that the division may waive the requirement of a one-well financial assurance for a well that is shut-in because of the lack of a pipeline connection. The division may release the one-well financial assurance upon the operator's or surety's written request after the well is returned to production if a blanket financial assurance covers the well.

C. Amounts.

(1) A blanket financial assurance shall be in the amount of $50,000 covering all oil, gas or service wells drilled, acquired or operated in this state by the principal on the bond.

(2) A one-well financial assurance shall be in the amounts stated below in accordance with the well's depth and location.

(a) Chaves, Eddy, Lea, McKinley, Rio Arriba, Roosevelt, Sandoval and San Juan counties, New Mexico: $5000 plus $1 per foot of projected depth of proposed well or measured depth of existing well.

(b) All other counties in the state: $10,000 plus $1 per foot of projected depth of proposed well or measured depth of existing well.

(3) The appropriate division district office may approve revised plans for an actively drilling well for drilling as much as 500 feet deeper than the depth stated on the well's financial assurance. Any well to be drilled more than 500 feet deeper than the depth stated on the well's financial assurance shall be covered by a new financial assurance in the amount prescribed for the new projected depth.

(4) The amount of the one-well financial assurance required for any intentionally deviated well shall be determined by the well's measured depth, and not its true vertical depth.

D. General requirements for financial assurance.

(1) The operator shall file financial assurance documents with the division's Santa Fe office, and obtain approvals and releases of financial assurance from that office.

(2) All financial assurance documents shall be on forms prescribed by or otherwise acceptable to the division.

(3) A financial assurance shall be conditioned for well plugging and abandonment and location restoration and remediation only, and not to secure payment for damages to livestock, range, crops or tangible improvements or any other purpose.

(4) The division may require proof that the individual signing for an entity on a financial assurance document or an amendment to a financial assurance document has the authority to obligate that entity.

E. Additional requirements for cash and surety bonds.

(1) Surety bonds shall be issued by a reputable corporate surety authorized to do business in the state of New Mexico.

(2) The operator shall deposit cash representing the full amount of the bond in an account in a federally-insured financial institution located within the state of New Mexico, such account to be held in trust for the division. Authorized representatives of the operator and the depository institution shall execute a document evidencing the cash bond's terms and conditions. The operator shall file the document with the division prior to the bond's effective date. If the operator's financial status or reliability is unknown to the division director he or she may require the filing of a financial statement or such other information as may be necessary to evaluate the operator's ability to fulfill the bond's conditions. From time to time any accrued interest over and above the bond's face amount may be paid to the operator.

F. Additional requirements for letters of credit.

(1) The division may accept irrevocable letters of credit issued by national or state-chartered banking associations.

(2) Letters of credit shall be irrevocable for a term of not less than five years, unless the applicant shows good cause for a shorter time period.

(3) Letters of credit shall provide for automatic renewal for successive, like terms upon expiration, unless the issuer has notified the division in writing of non-renewal at least 30 days prior to expiration.

(4) The division may forfeit and collect a letter of credit if not replaced by an approved financial assurance at least 30 days before the expiration date.

G. Release of financial assurance.

(1) The division shall release a financial assurance document upon the operator's or surety's written request if all wells drilled or acquired under that financial assurance have been plugged and abandoned and the location restored and remediated and released pursuant to 19.15.4.202 NMAC, or have been covered by another financial assurance the division has approved.

(2) Transfer of a property or a change of operator does not of itself release a financial assurance. The division shall not approve a request for change of operator for a well until the new operator has the required financial assurance in place.

H. Forfeiture of financial assurance.

(1) Upon the operator's failure to properly plug and abandon and restore and remediate the location of any well or wells a financial assurance covers, the division shall give notice to the operator and surety, if applicable, and hold a hearing as to whether the well or wells should be plugged and abandoned and the location restored and remediated in accordance with a division-approved plugging program. If it is determined at the hearing that the operator has failed to plug and abandon the well and restore and remediate the location as provided for in the financial assurance or division rules, the division director shall issue an order directing the well to be plugged or abandoned and the location restored and remediated in a time certain. Such an order may also direct the forfeiture of the financial assurance upon the failure or refusal of the operator, surety or other responsible party to properly plug and abandon the well and restore and remediate the location.

(2) If the financial assurance's proceeds exceed the costs the division incurred plugging and abandoning the well and restoring and remediating the location the financial assurance covers, the division shall return the excess to the surety or the operator, as appropriate.

(3) If the financial assurance's proceeds are not sufficient to cover all the costs the division incurred in plugging and abandoning the well and restoring and remediating the location, the division may seek indemnification from the operator as provided in NMSA 1978, Section 70-2-14(E).

(4) The division shall deposit all forfeitures and all funds collected pursuant to a judgment in a suit for indemnification in the oil and gas reclamation fund.

I. Effective dates.

(1) 19.15.3.101 NMAC is effective immediately as to all wells drilled or acquired after its effective date.

(2) As to all other wells, 19.15.3.101 NMAC is effective January 1, 2008.

[1-1-50, 6-17-77, 6-5-86, 2-1-96; 19.15.3.101 NMAC - Rn, 19 NMAC 15.C.101, 11-15-01; A, 12/15/05]

19.15.3.102 PERMIT TO DRILL, DEEPEN OR PLUG BACK:

A. The operator shall obtain a permit prior to commencing drilling, deepening or re-entry operations, or before plugging a well back to a different pool or completing or re-completing a well in an additional pool.

B. Applicants shall file a complete form C-101, application for permit to drill, deepen or plug back, and complete form C-102, well location and acreage dedication plat, and meet the following requirements, if applicable:

(1) an applicant for a permit to drill any well within the corporate limits of any city, town or village of this state shall give notice to the duly constituted governing body of such city, town or village or its duly authorized agent and certify on form C-101 that it gave such notice;

(2) an applicant for a permit to drill in any quarter-quarter section containing an existing well or wells operated by another operator shall concurrently file a plat or other acceptable document locating and identifying such well or wells, furnish a copy of the application to the other operator or operators in the quarter-quarter section and certify on form C-101 that it furnished such copies;

(3) an applicant for a permit to operate a well in a spacing or proration unit containing an existing well or wells operated by another operator shall also comply with Paragraph (2) of Subsection E of 19.15.3.104 NMAC.

C. The division director or his designee may deny a permit to drill, deepen or plug back if the applicant is not in compliance with Subsection A of 19.15.1.40 NMAC. In determining whether to grant or deny the permit, the division director or his designee shall consider such factors as whether the non-compliance with

Subsection A of 19.15.1.40 NMAC is caused by the operator not meeting the financial assurance requirements of 19.15.3.101 NMAC, being subject to a division or commission order finding the operator to be in violation of an order requiring corrective action, having a penalty assessment that has been unpaid for more than 70 days since the issuance of the order assessing the penalty or having more than the allowed number of wells out of compliance with 19.15.4.201 NMAC. If the non-compliance is caused by the operator having more than the allowed number of wells not in compliance with 19.15.4.201 NMAC, the division director or his designee shall consider the number of wells not in compliance, the length of time the wells have been out of compliance and the operator's efforts to bring the wells into compliance.

D. The division may impose conditions on an approved permit to drill, deepen or plug back.

E. The operator shall keep a copy of the approved form C-101 at the well site during drilling operations.

[1-1-50, 5-22-73...2-1-96; 19.15.3.102 NMAC - Rn, 19 NMAC 15.C.102, 11-15-01; A, 12/15/05]

19.15.3.103 SIGN ON WELLS:

A. All wells and related facilities regulated by the division shall be identified by a sign, which sign shall remain in place until the well is plugged and abandoned and the related facilities are closed.

B. For drilling wells, the sign shall be posted on the derrick or not more than 20 feet from the well.

C. The sign shall be of durable construction and the lettering shall be legible and large enough to be read under normal conditions at a distance of 50 feet.

D. The wells on each lease or property shall be numbered in non-repetitive, logical and distinctive sequence.

E. An operator will have 90 days from the effective date of an operator name change to change the operator name on the well sign unless an extension of time, for good cause shown along with a schedule for making the changes, is granted.

F. Each sign shall show the:

(1) number of well;

(2) name of property;

(3) name of operator;

(4) location by footage, quarter-quarter section, township and range (or Unit Letter can be substituted for the quarter-quarter section); and

(5) API number.

[1-1-50, 2-1-96, 6-30-97, 3-31-00; 19.15.3.103 NMAC - Rn, 19 NMAC 15.C.103, 11-15-01; A, 01-31-03]

19.15.3.104 WELL SPACING AND LOCATION:

A. Classification Of Wells: Wildcat And Development Wells

(1) Wildcat Well

(a) In San Juan, Rio Arriba, Sandoval, and McKinley counties a wildcat well is any well to be drilled the spacing unit of which is a distance of two miles or more from:

(i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and

(ii) any well that has produced oil or gas from the formation to which the proposed well is projected to be drilled.

(b) In all counties except San Juan, Rio Arriba, Sandoval, and McKinley, a wildcat well is any well to be drilled the spacing unit of which is a distance of one mile or more from:

(i) the outer boundary of any defined pool that has produced oil or gas from the formation to which the well is projected to be drilled; and

(ii) any well that has produced oil or gas from the formation to which the proposed well is projected.

(2) Development Well

(a) Any well that is not a wildcat well shall be classified as a development well for the nearest pool that has produced oil or gas from the formation to which the well is projected to be drilled. Such development well shall be spaced, drilled, operated, and produced in accordance with the rules in effect for that pool, provided the well is completed in that pool.

(b) Any well classified as a development well for a pool but completed in a producing formation not included in the vertical limits of that pool shall be operated and produced in accordance with the rules

in effect for the nearest pool that is producing from that formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley counties or within one mile everywhere else. If there is no designated pool for that producing formation within the two miles in San Juan, Rio Arriba, Sandoval, and McKinley counties or within one mile everywhere else, the well shall be re-classified as a wildcat well.

B. Oil Well Acreage And Well Location Requirements

(1) Any wildcat well that is projected to be drilled as an oil well to a formation and in an area that in the opinion of the division may reasonably be presumed to be productive of oil rather than gas and each development well for a defined oil pool, unless otherwise provided in special pool orders, shall be located on a spacing unit consisting of approximately 40 contiguous surface acres substantially in the form of a square which is a legal subdivision of the U.S. public land surveys, which is a governmental quarter-quarter section or lot, and shall be located no closer than 330 feet to any boundary of such unit. Only those 40-acre spacing units committed to active secondary recovery projects shall be permitted more than four wells.

(2) If a well drilled as an oil well is completed as a gas well but does not conform to the applicable gas well location rules, the operator must apply for administrative approval for a non-standard location before the well can produce. The director may set any such application for hearing.

C. Gas Wells Acreage And Well Location Requirements. Any wildcat well that is projected to be drilled as a gas well to a formation and in an area that in the opinion of the division may reasonably be presumed to be productive of gas rather than oil and each development well for a defined gas pool, unless otherwise provided in special pool orders, shall be spaced and located as follows:

(1) 640-acre spacing applies to any deep gas well in Rio Arriba, San Juan, Sandoval or McKinley county that is projected to be drilled to a gas producing formation older than the Dakota formation or is a development well within a gas pool created and defined by the division after June 1, 1997 in a formation older than the Dakota formation, which formation or pool is located within the surface outcrop of the Pictured Cliffs formation (i.e., the San Juan Basin). Such well shall be located on a spacing unit consisting of 640 contiguous surface acres, more or less, substantially in the form of a square which is a section and legal subdivision of the U.S. public land surveys and shall be located no closer than: 1200 feet to any outer boundary of the spacing unit, 130 feet to any quarter section line, and 10 feet to any quarter-quarter section line or subdivision inner boundary.

(2) 320-acre spacing applies to any deep gas well in Lea, Chaves, Eddy or Roosevelt county, defined as a well that is projected to be drilled to a gas producing formation or is within a defined gas pool in the Wolfcamp or an older formation. Such well shall be located on a spacing unit consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U.S. public land surveys provided that:

(a) the initial well on a 320-acre unit is located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and

(b) only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(3) 160-acre spacing applies to any other gas well not covered above. Such well shall be located in a spacing unit consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section and a legal subdivision of the U.S. public land surveys and shall be located no closer than 660 feet to any outer boundary of such unit and no closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

D. Acreage Assignment

(1) Well Tests and Classification. It is the responsibility of the operator of any wildcat or development gas well to which more than 40 acres has been dedicated to conduct a potential test within 30 days following completion of the well and to file the test with the division within 10 days following completion of the test. (See Rule 401)

(a) The date of completion for a gas well is the date of the conclusion of active completion work on the well.

(b) If the division determines that a well should not be classified as a gas well, the division will reduce the acreage dedicated to the well to the standard acreage for an oil well.

(c) Failure of the operator to file the test within the specified time will also subject the well to such acreage reduction.

(2) Non-Standard Spacing Units. Any well that does not have the required amount of acreage dedicated to it for the pool or formation in which it is completed may not be produced until a standard spacing unit for the well has been formed and dedicated or until a non-standard spacing unit has been approved.

(a) Division district offices have the authority to approve non-standard spacing units without notice when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U. S. public land surveys and/or consists of an entire governmental section and the non-standard spacing unit is not less than 70% or more than 130% of a standard spacing unit. The operator must obtain division approval of division Form C-102 showing the proposed non-standard spacing unit and the acreage contained therein.

(b) The director may grant administrative approval to non-standard spacing units after notice and opportunity for hearing when an application has been filed and the unorthodox size or shape is necessitated by a variation in the legal subdivision of the U.S. public land surveys or the following facts exist:

(i) the non-standard spacing unit consists of: (A) a single quarter-quarter section or lot or (B) quarter-quarter sections or lots joined by a common side; and

(ii) the non-standard spacing unit lies wholly within: a single quarter section if the well is completed in a pool or formation for which 40, 80, or 160 acres is the standard spacing unit size; a single half section if the well is completed in a pool or formation for which 320 acres is the standard spacing unit size; or a single section if the well is completed in a pool or formation for which 640 acres is the standard spacing unit size.

(c) Applications for administrative approval of non-standard spacing units pursuant to Subsection D, Paragraph (2), Subparagraph (b) of 19.15.3.104 NMAC shall be submitted to the division's Santa Fe office and accompanied by: (i) a plat showing the spacing unit and an applicable standard spacing unit for that pool or formation, the proposed well dedications and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement discussing the reasons for the formation of the non-standard spacing unit.

(d) The applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in Subparagraph (c) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the division receives the application. The director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period.

(e) The director may set for hearing any application for administrative approval.

(3) Number of wells per spacing unit. Exceptions to the provisions of statewide rules or special pool orders concerning the number of wells allowed per spacing unit may be permitted by the director only after notice and opportunity for hearing. Notice shall be given to those affected persons defined in Rule 1207.A.(2).

E. Special rules for multiple operators within a spacing unit

(1) Allowable production. If an operator completes a well in an oil pool or prorated gas pool, located within a proration unit containing an existing well or wells producing from that pool and operated by a different operator, unless otherwise agreed by all operators of wells producing from that proration unit, the allowable production from such newly completed well shall not exceed the difference between the allowable production for such proration unit and the actual production from such pool of the existing well or wells within such proration unit. The division may authorize exceptions to this provision after hearing following appropriate notice.

(2) Notice requirements. Any operator who intends to operate a well in a spacing or proration unit containing an existing well or wells operated by another operator shall, prior to filing the application for permit to drill, deepen or plug back for such well, furnish written notification of its intent to the operator of each such existing well, and, if the unit includes state or federal minerals, to the state land office or United States bureau of land management, as applicable; provided that separate notification to the bureau of land management shall not be required if the application will be filed with that agency pursuant to 19.15.1.14 NMAC. Such notices shall be sent by certified mail, return receipt requested, and shall specify the location and depth of the proposed well. The applicant shall submit with its application for permit to drill, deepen or plug back either (a) a statement attesting that, at least twenty days before the date that the application was submitted to the division, it sent notices to the designated parties, by certified mail, return receipt requested, advising them that if they have an objection a written statement thereof must be delivered to the proposing operator within twenty days of the date such notice was mailed, and that it has received no such objection, or (b) written waivers from all persons required to be notified (approval of the application by the United States bureau of land management being deemed equivalent to waiver by that agency). In event of objection, the application may be approved only after hearing.

(3) Transfer of wells. If an operator transfers operation of less than all of its well located within a spacing or proration unit to another operator, and such spacing unit includes any state or federal minerals, the

operator shall, prior to filing form C-104A to effectuate such transfer, provide written notification to the state land office or United States bureau of land management, as applicable, of such transfer.

(4) Compulsory pooled units. No provision of 19.15.3.104 NMAC shall authorize the operation of any producing well within a unit described in an existing compulsory pooling order by any operator other than the operator designated in such order.

(5) Federal or state exploratory units. No provision of 19.15.3.104 NMAC shall authorize the operation of any producing well within any federal exploratory unit or state exploratory unit by an operator other than the designated operator of such unit except as provided in the rules of the United States bureau of land management or state land office applicable to such unit.

F. Unorthodox Locations

(1) Well locations for producing wells and/or injection wells that are unorthodox based on the requirements of Subsection B above and are necessary for an efficient production and injection pattern within a secondary recovery, tertiary recovery, or pressure maintenance project are hereby authorized, provided that the unorthodox location within the project is no closer than the required minimum distance to the outer boundary of the lease or unitized area, and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. These locations shall only require such prior approvals as are necessary for an unorthodox location.

(2) The director may grant an exception to the well location requirements of Subsections B and C above or special pool orders after notice and opportunity for hearing when the exception is necessary to prevent waste or protect correlative rights.

(3) Applications for administrative approval pursuant to Subsection F, Paragraph (2) above shall be submitted to the division's Santa Fe office accompanied by (a) a plat showing the spacing unit, the proposed unorthodox well location and the adjoining spacing units and wells; (b) a list of affected persons as defined in Rule 1207.A(2); and (c) information evidencing the need for the exception. Notice shall be given as required in Rule 1207.A(2).

(4) The applicant shall submit a statement attesting that applicant, on or before the date that the application was submitted to the division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in Subsection F, Paragraph (3) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the division receives the application. The director may approve the unorthodox location upon receipt of waivers from all the affected persons or if no affected person has filed an objection within the 20-day period.

(5) The director may set for hearing any application for administrative approval of an unorthodox location.

(6) Whenever an unorthodox location is approved, the division may order any action necessary to offset any advantage of the unorthodox location.

G. Effect On Allowables

(1) If the drilling tract is within a prorated/allocated oil pool or is subsequently placed within such pool and the drilling tract consists of less than 39½ acres or more than 40½ acres, the top unit allowable for the well shall be increased or decreased in the proportion that the number of acres in the drilling tract bears to 40.

(2) If the drilling tract is within a prorated/allocated gas pool or is subsequently placed within such pool and the drilling tract consists of less than 158 acres or more than 162 acres in 160-acre pools, or less than 316 acres or more than 324 acres in 320-acre pools, or less than 632 acres or more than 648 acres in 640-acre pools, the top allowable for the well shall be decreased or increased in the proportion that the number of acres in the drilling tract bears to a standard spacing unit for the pool.

(3) In computing acreage under Paragraphs (1) and (2) above, less than ½ acre shall not be counted but ½ acre or more shall count as one acre.

(4) The provisions of Paragraphs (1) and (2) above shall apply only to wells completed after January 1, 1950.

H. Division-Initiated Exceptions - In order to prevent waste, the division may, after hearing, set different spacing requirements and require different acreage for drilling tracts in any defined oil or gas pool.

I. Pooling Or Communitization Of Small Oil Lots

(1) The division may approve the pooling or communitization of fractional oil lots of 20.49 acres or less with a contiguous oil spacing unit when the ownership is common and the tracts are part of the same lease with the same royalty interests if the following requirements are satisfied:

(a) applications for administrative approval shall be submitted to the division's Santa Fe office and accompanied by: (i) a plat showing the dimensions and acreage involved, the ownership of such acreage, the

location of all existing and proposed wells and all adjoining spacing units; (ii) a list of affected persons as defined in Rule 1207.A(2); and (iii) a statement discussing the reasons for the pooling or communitization;

(b) the applicant shall submit a statement attesting that the applicant, on or before the date the application was submitted to the division, sent notification to the affected persons by submitting a copy of the application, including a copy of the plat described in (a) above, by certified mail, return receipt requested, advising them that if they have an objection it must be filed in writing within 20 days from the date the division receives the application; the director may approve the application upon receipt of waivers from all the notified persons or if no person has filed an objection within the 20-day period;

(c) the director may set for hearing any application for administrative approval.

(2) The division may consider the common ownership and common lease requirements met if the applicant furnishes with the application a copy of an executed pooling agreement communitizing the tracts involved.
[1-1-50...2-1-96; A, 6-30-97; A, 8-31-99; 19.15.3.104 NMAC - Rn, 19 NMAC 15.C.104, 11-15-01; A, 05/31/05]

19.15.3.105 [RESERVED].
[1-1-50, 9-1-89...2-1-96; 19.15.3.105 NMAC - Rn, 19 NMAC 15.C.105, 11-15-01; Repealed, 5-28-04]

19.15.3.106 SEALING OFF STRATA:

A. During the drilling of any oil well, injection well or any other service well, all oil, gas, and water strata above the producing and/or injection horizon shall be sealed or separated in order to prevent their contents from passing into other strata.

B. All fresh waters and waters of present or probable value for domestic, commercial, or stock purposes shall be confined to their respective strata and shall be adequately protected by methods approved by the division. Special precautions by methods satisfactory to the division shall be taken in drilling and abandoning wells to guard against any loss of artesian water from the strata in which it occurs, and the contamination of artesian water by objectionable water, oil, or gas.

C. All water shall be shut off and excluded from the various oil- and gas-bearing strata which are penetrated. Water shut-offs shall ordinarily be made by cementing casing.
[1-1-50, 3-1-91...2-1-96; 19.15.3.106 NMAC - Rn, 19 NMAC 15.C.106, 11-15-01]

19.15.3.107 CASING AND TUBING REQUIREMENTS:

A. Any well drilled for oil or natural gas shall be equipped with such surface and intermediate casing strings and cement as may be necessary to effectively seal off and isolate all water-, oil-, and gas-bearing strata and other strata encountered in the well down to the casing point. In addition thereto, any well completed for the production of oil or natural gas shall be equipped with a string of properly cemented production casing at sufficient depth to ensure protection of oil- and gas-bearing strata encountered in the well, including the one(s) to be produced.

B. Sufficient cement shall be used on surface casing to fill the annular space behind the casing to the top of the hole, provided however, that authorized field personnel of the division may, at their discretion, allow exceptions to the foregoing requirement when known conditions in a given area render compliance impracticable.

C. All cementing shall be by pump and plug method unless some other method is expressly authorized by the division.

D. All cementing shall be with conventional-type hard-setting cements to which such additives (lighteners, densifiers, extenders, accelerators, retarders, etc.) have been added to suit conditions in the well.

E. Authorized field personnel of the division may, when conditions warrant, allow exceptions to the above paragraph and permit the use of oil-base casing packing material in lieu of hard-setting cements on intermediate and production casing strings; provided however, that when such materials are used on the intermediate casing string, conventional-type hard-setting cements shall be placed throughout all oil- and gas-bearing zones and throughout at least the lowermost 300 feet of the intermediate casing string. When such materials are used on the production casing string, conventional-type hard-setting cements shall be placed throughout all oil- and gas-bearing zones and shall extend upward a minimum of 500 feet above the uppermost perforation or, in the case of an open-hole completion, 500 feet above the production casing shoe.

F. All casing strings shall be tested and proved satisfactory as provided in Subsection I. below.

G. After cementing, but before commencing tests required in Subsection I. below, all casing strings shall stand cemented in accordance with Option 1 **or** 2 below. Regardless of which option is taken, the casing shall remain stationary and under pressure for at least eight hours after the cement has been placed. Casing shall be "under pressure" if some acceptable means of holding pressure is used or if one or more float valves are employed to

hold the cement in place.

(1) **Option 1** Allow all casing strings to stand cemented a minimum of eighteen (18) hours prior to commencing tests. Operators using this option shall report on Form C-103 the actual time the cement was in place before initiating tests.

(2) **Option 2** (May be used in the counties of San Juan, Rio Arriba, McKinley, Sandoval, Lea, Eddy, Chaves, and Roosevelt only.) Allow all casing strings to stand cemented until the cement has reached a compressive strength of at least 500 pounds per square inch in the "zone of interest" before commencing tests, provided however, that no tests shall be commenced until the cement has been in place for at least eight (8) hours.

(a) The "zone of interest" for surface and intermediate casing strings shall be the bottom 20 percent of the casing string, but shall be no more than 1000 feet nor less than 300 feet of the bottom-part of the casing unless the casing is set at less than 300 feet. The "zone of interest" for production casing strings shall include the interval or intervals where immediate completion is contemplated.

(b) To determine that a minimum compressive strength of 500 pounds per square inch has been attained, operators shall use the typical performance data for the particular cement mix used in the well, at the minimum temperature indicated for the zone of interest by Figure 107-A, Temperature Gradient Curves. Typical performance data used shall be that data furnished by the cement manufacturer or by a competent materials testing agency, as determined in accordance with the latest edition of API Code RP 10 B "Recommended Practice for Testing Oil-Well Cements."

(See Temperature Gradient - Page 17A)

H. Operators using the compressive strength criterion (Option 2) shall report the following information on Form C-103:

(1) Volume of cement slurry (cubic feet) and brand name of cement and additives, percent additives used, and sequence of placement if more than one type cement slurry is used.

(2) Approximate temperature of cement slurry when mixed.

(3) Estimated minimum formation temperature in zone of interest.

(4) Estimate of cement strength at time of casing test.

(5) Actual time cement in place prior to starting test.

I. All casing strings except conductor pipe shall be tested after cementing and before commencing any other operations on the well. Form C-103 shall be filed for each casing string reporting the grade and weight of pipe used. In the case of combination strings utilizing pipe of varied grades or weights, the footage of each grade and weight used shall be reported. The results of the casing test, including actual pressure held on pipe and the pressure drop observed shall also be reported on the same Form C-103.

(1) Casing strings in wells drilled with rotary tools shall be pressure tested. Minimum casing test pressure shall be approximately one-third of the manufacturer's rated internal yield pressure except that the test pressure shall not be less than 600 pounds per square inch and need not be greater than 1500 pounds per square inch. In cases where combination strings are involved, the above test pressure shall apply to the lowest pressure rated casing used. Test pressures shall be applied for a period of 30 minutes. If a drop of more than 10 percent of the test pressure should occur, the casing shall be considered defective and corrective measures shall be applied.

(2) Casing strings in wells drilled with cable tools may be tested as outlined in Subsection I, Paragraph (1) above, or by bailing the well dry in which case the hole must remain satisfactorily dry for a period of at least one (1) hour before commencing any further operations on the well.

J. Well Tubing Requirements

(1) All flowing oil wells equipped with casing larger in size than 2 7/8-inch OD shall be tubed.

(2) All gas wells equipped with casing larger in size than 3 ½-inch OD shall be tubed.

(3) Tubing shall be set as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone.

(4) The supervisor of the appropriate division district office, upon application, may grant exceptions to these requirements, provided waste will not be caused.

(5) The supervisor may request that an application be reviewed by the Director. The operator shall submit information and give notice as requested by the Director. Unprotested applications may be approved after 20 days of receipt of the application and supporting information. If the application is protested, or the Director so decides, the application shall be set for hearing.

K. Repealed.

[1-1-50, 5-5-58, 6-26-59, 2-29-64, 2-1-96, 2-26-99; 19.15.3.107 NMAC - Rn, 19 NMAC 15.C.107, 11-15-01]

19.15.3.108 DEFECTIVE CASING OR CEMENTING: If any well appears to have a defective casing program or faultily cemented or corroded casing which will permit or may create underground waste or contamination of fresh waters, the operator shall give written notice to the division within five (5) working days and proceed with diligence to use the appropriate method and means to eliminate such hazard. If such hazard of waste or contamination of fresh water cannot be eliminated, the well shall be properly plugged and abandoned. [1-1-50...2-1-96; 19.15.3.108 NMAC - Rn, 19 NMAC 15.C.108, 11-15-01]

19.15.3.109 BLOWOUT PREVENTION: (See Section 114, Subsection B of 19.15.3 NMAC also)

A. Blowout preventers shall be installed and maintained in good working order on all drilling rigs operating in areas of known high pressures at or above the projected depth of the well and in all areas where pressures which will be encountered are unknown, and on all workover rigs working on wells in which high pressures are known to exist.

B. Blowout preventers shall be installed and maintained in good working order on all drilling rigs and workover rigs operating within the corporate limits of any city, town, or village, or within 1320 feet of habitation, school, or church, wherever located.

C. All operators, when filing Form C-101, Application for Permit to Drill, Deepen, or Plug Back, or Form C-103, Sundry Notices, for any operation requiring blowout prevention equipment in accordance with Subsections A and B above, shall submit a proposed blowout prevention program for the well. The program as submitted may be modified by the district supervisor if, in his judgement, such modification is necessary. [10-22-74...2-1-96; 19.15.3.109 NMAC - Rn, 19 NMAC 15.C.109, 11-15-01]

19.15.3.110 PULLING OUTSIDE STRINGS OF CASING: In pulling outside strings of casing from any oil or gas well, the space outside the casing left in the hole shall be kept and left full of mud-laden fluid or cement of adequate specific gravity to seal off all fresh and salt water strata and any strata bearing oil or gas not producing. [1-1-50...2-1-96; 19.15.3.110 NMAC - Rn, 19 NMAC 15.C.110, 11-15-01]

19.15.3.111 DEVIATION TESTS AND DIRECTIONAL WELLS:

A. Definitions - the following definitions shall apply to Section 111 of 19.15.3 NMAC only:

(1) Azimuth - the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

(2) Deviated Well - any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Section 111, Subsection B of 19.15.3 NMAC.

(3) Directional Well - a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Section 111, Subsection C of 19.15.3 NMAC.

(4) Kick-off Point - the point at which the wellbore is intentionally deviated from vertical.

(5) Lateral - any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical.

(6) Penetration Point - the point where the wellbore penetrates the top of the pool from which it is intended to produce.

(7) Producing Area - the area that lies within a window formed by plotting the measured distance from the North, South, East and West boundaries of a project area, inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing unit for the applicable pool(s).

(8) Producing Interval - that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus.

(9) Project Area - an area designated on Form C-102 that is enclosed by the outer boundaries of a spacing unit, a combination of complete spacing units, or an approved secondary, secondary, tertiary or pressure maintenance project.

(10) Project Well - any well drilled, completed, produced or injected into as either a vertical well, deviated well or directional well.

(11) Spacing Unit - the acreage that is dedicated or a well in accordance with Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the division and all non-standard such units previously approved by the division.

(12) Terminus - the farthest point attained along the wellbore.

(13) Unorthodox - any part of the producing interval which is located outside of the producing area.

(14) Vertical Well - a well that does not have an intentional departure or course deviation from the vertical.

(15) Wellbore - the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted.

B. Deviated Wellbores

(1) Deviation Tests Required. Any vertical or deviated well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas.

(2) Excessive Deviation. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole. When the maximum possible horizontal displacement exceeds the distance to the nearest outer boundary line of the appropriate unit, the operator shall run a directional survey to establish the location of the producing interval(s).

(3) Unorthodox Locations. If the results of the directional survey indicate that the producing interval is more than 50 feet from the approved surface location and closer than the minimum setback requirements to the outer boundaries of the applicable unit, then the well shall be considered unorthodox. To obtain authority to produce such well, the operator shall file an application with the Division director, copy to the appropriate division district office, and shall otherwise follow the normal process outlined in Section 104, Subsection F, Paragraph (3) of 19.15.3 NMAC to obtain approval of the unorthodox location.

(4) Directional Survey Requirements. Upon request from the Division director, any vertical or deviated well shall be directionally surveyed. The appropriate division district office shall be notified of the approximate time any directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the division upon completion of the well. The division shall not assign an allowable to the well until all such directional surveys have been filed.

C. Directional Wellbores

(1) Directional Drilling Within a Project Area. A permit to directionally drill a wellbore may be granted by the appropriate division district office if the producing interval is entirely within the producing area or at an unorthodox location previously approved by the division. Additionally, if the project area consists of a combination of drilling units and includes any State or Federal acreage, a copy of the OCD Form C-102 shall be sent to the State Land Office or the Bureau of Land Management.

(2) Unorthodox Wellbores. If all or part of the producing interval of any directional wellbore is projected to be outside of the producing area, the wellbore shall be considered unorthodox. To obtain approval for such wellbore, the applicant shall file a written application in duplicate with the Division director, copy to the appropriate division district office, and shall otherwise follow the normal process outlined in Section 104, Subsection F, Paragraph (3) of 19.15.3 NMAC.

(3) Allowables for Project Areas With Multiple Proration Units. The maximum allowable assigned to the project area within a prorated pool shall be based upon the number of standard spacing units (or approved non-standard spacing units) that are developed or traversed by the producing interval of the directional wellbore or wellbores. Such maximum allowable shall be applicable to all production from the project area, including any vertical wellbores on standard spacing units inside the project area.

(4) Directional Surveys Required. A directional survey shall be required on each well drilled under the provisions of this section. The appropriate division district office shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the division upon completion of the well. The division shall not assign an allowable to the well until all such directional surveys have been filed. If the directional survey indicates that any part of the producing interval is outside of the producing area, or, in the case of an approved unorthodox location, less than the approved setback requirements from the outer boundary of the applicable unit, then the operator shall file an application with the Division director, copy to the appropriate division district office, and shall otherwise follow the normal process outlined in Section 104, Subsection F, Paragraph (3) of 19.15.3 NMAC to obtain approval of the unorthodox location.

(5) Re-entry of Vertical or Deviated Wellbores for Directional Drilling Projects. These wellbores shall be considered orthodox provided the surface location is orthodox and the location of producing interval is within the tolerance allowed for deviated wellbores under Section 111, Subsection B, Paragraph (3) of 19.15.3 NMAC.

D. Additional Matters

(1) Directional surveys required under the provisions of Section 111 of 19.15.3 NMAC shall have shot points no more than 200 feet apart and shall be run by competent surveying companies that are approved by the Division director. Exceptions to the minimum shot point spacing will be allowed provided the accuracy of the survey is still within acceptable limits.

(2) The Division director, may, at his discretion, set any application for administrative approval whereby the operator shall submit appropriate information and give notice as requested by the Division director. Unprotested applications may be approved administratively within 20 days of receipt of the application and supporting information. If the application is protested, or the Division director decides that a public hearing is appropriate, the application may be set for public hearing.

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in Section 111 of 19.15.3 NMAC shall be granted only after notice and opportunity for hearing.

E. Reserved.

(1) Reserved.

(2) Reserved.

F. Reserved.

(1) Reserved.

(2) Reserved.

(3) Reserved.

[1-1-50; 8-28-62; 3-2-84; 7-26-95; 2-1-96; A, 7-31-97; 19.15.3.111 NMAC - Rn, 19 NMAC 15.C.111, 11-15-01]

19.15.3.112 [MULTIPLE COMPLETIONS; BRADENHEAD GAS WELLS]

A. Multiple Completions

(1) Filing. Operators intending to multiple complete must file Form C-101 and/or C-103 for approval before completing and C-104 after completing along with any information required by the form instructions.

(2) Operation and Testing

(a) Wells shall be completed and produced so that no commingling of hydrocarbons from separate pools occurs.

(b) The operator shall commence a segregation and/or packer leakage test within 20 days after the multiple completion. Segregation tests and/or packer leakage tests shall also be made any time the packer is disturbed. The operator shall also conduct any other tests and determinations required by the division. The appropriate district office shall be notified 48 hours in advance of tests so the district office may schedule personnel to witness the tests. Offset operators may witness such tests and shall advise the operator in writing if they desire to be notified of the tests. Test results shall be filed with the division within 20 days of test completion. In the event a segregation and/or packer leakage test indicates communication between separate pools, the operator shall immediately notify the division and commence corrective action on the well.

(c) Wells shall be equipped so that (i) reservoir pressure may be determined for each of the separate pools, and (ii) meters may be installed so that the gas and/or oil produced from each of the separate pools may be accurately measured.

(d) No multiple completion shall produce in a manner unnecessarily wasting reservoir energy.

(e) The division may require the proper plugging of any zone of a multiple-completed well if the plugging appears necessary to prevent waste, protect correlative rights or protect groundwater, public health or the environment.

B. Bradenhead Gas Wells

(1) The production of gas from a bradenhead gas well may be permitted only by order of the division upon hearing, except as noted by the provisions of Subsection C of 19.15.3.112 NMAC.

(2) The application for such hearings shall be submitted in triplicate and shall include an exhibit showing the location of all wells on applicant's lease and all offset wells on offset leases, together with a diagrammatic sketch showing the casing program, formation tops, estimated top of cement on each casing string run and any other pertinent data, including drill stem tests.

(3) The Division director shall have authority to grant an exception to the requirements of paragraph A. above without notice and hearing where application has been filed in due form, and when the lowermost producing zone involved in the completion is an oil or gas producing zone within the defined limits of an oil or gas pool and the producing zone to be produced through the bradenhead connection is a gas producing zone within the defined limits of a gas pool.

(4) Applicants shall furnish all operators who offset the lease upon which the subject well is located a copy of the application to the division, and applicant shall include with his application a written stipulation that all offset operators have been properly notified. The Division director shall wait at least 10 days before approving the production of gas from the bradenhead gas well, and shall approve such production only in the absence of objection from any offset operator. In the event an operator objects to the completion the Division director shall consider the matter only after proper notice and hearing.

(5) The division may waive the 10-day waiting period requirement if the applicant furnishes the division with the written consent to the production of gas from the bradenhead connection by all offset operators involved.

(6) Section 112-2 of 19.15.3 NMAC shall apply only to wells hereinafter completed as bradenhead gas wells.

(7) (1), (2), (3), (4) Repealed.

(8) (1); (1).(a); (1).(b); (2) Repealed.

(9) (1), (2) Repealed.

(10) (1).(a), (b), (c), (d), (e), (f), (g) Reserved.

[4-3-53; 7-3-58...2-1-82; 2-1-96; 19.15.3.112 NMAC - Rn, 19 NMAC 15.C.112-A and 112-B, 11-15-01]

19.15.3.113 SHOOTING AND CHEMICAL TREATMENT OF WELLS: If injury results to the producing formation, injection interval, casing or casing seat from shooting, fracturing, or treating a well and which injury may create underground waste or contamination of fresh water, the operator shall give written notice to the division within five (5) working days and proceed with diligence to use the appropriate method and means for rectifying such damage. If shooting, fracturing, or chemical treating results in irreparable injury to the well the division may require the operator to properly plug and abandon the well.

[1-1-50...2-1-96; 19.15.3.113 NMAC - Rn, 19 NMAC 15.C.113, 11-15-01]

19.15.3.114 SAFETY REGULATIONS:

A. All oil wells shall be cleaned into a pit or tank, not less than 40 feet from the derrick floor and 150 feet from any fire hazard. All flowing oil wells must be produced through an oil and gas separator of ample capacity and in good working order. No boiler or portable electric lighting generator shall be placed or remain nearer than 150 feet to any producing well or oil tank. Any rubbish or debris that might constitute a fire hazard shall be removed to a distance of at least 150 feet from the vicinity of wells and tanks. All waste shall be burned or disposed of in such manner as to avoid creating a fire hazard.

B. When coming out of the hole with drill pipe, drilling fluid shall be circulated until equalized and subsequently drilling fluid level shall be maintained at a height sufficient to control subsurface pressures. During course of drilling blowout preventers shall be tested at least once each 24-hour period.

[1-1-50...2-1-96; 19.15.3.114 NMAC - Rn, 19 NMAC 15.C.114, 11-15-01]

19.15.3.115 WELL AND LEASE EQUIPMENT:

A. Christmas tree fittings or wellhead connections shall be installed and maintained in first class condition so that all necessary pressure tests may easily be made on flowing wells. On oil wells the Christmas tree fittings shall have a test pressure rating at least equivalent to the calculated or known pressure in the reservoir from which production is expected. On gas wells the Christmas tree fittings shall have a test pressure equivalent to at least 150 percent of the calculated or known pressure in the reservoir from which production is expected.

B. Valves shall be installed and maintained in good working order to permit pressures to be obtained on both casing and tubing. Each flowing well shall be equipped to control properly the flowing of each well, and in case of an oil well, shall be produced into an oil and gas separator of a type generally used in the industry.

[1-1-50...2-1-96; 19.15.3.115 NMAC - Rn, 19 NMAC 15.C.115, 11-15-01]

19.15.3.116 RELEASE NOTIFICATION AND CORRECTIVE ACTION:

A. Notification

(1) The division shall be notified of any unauthorized release occurring during the drilling, producing, storing, disposing, injecting, transporting, servicing or processing of crude oil, natural gases, produced water, condensate or oil field waste including Regulated NORM, or other oil field related chemicals, contaminants or mixture thereof, in the State of New Mexico in accordance with the requirements of Section 116 of 19.15.3 NMAC.

(2) The division shall be notified in accordance with Section 116 of 19.15.3 NMAC with respect to

any release from any facility of oil or other water contaminant, in such quantity as may with reasonable probability be detrimental to water or cause an exceedance of the standards in Section 19, Subsection B, Paragraphs (1) and (2) or (3) of 19.15.1 NMAC.

B. Reporting Requirements. Notification of the above releases shall be made by the person operating or controlling either the release or the location of the release in accordance with the following requirements:

(1) A Major Release shall be reported by giving both immediate verbal notice and timely written notice pursuant to Subsection C, Paragraphs (1) and (2) of 19.15.3.116 NMAC. A Major Release is:

(a) an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;

(b) an unauthorized release of any volume which:

(i) results in a fire;

(ii) will reach a water course;

(iii) may with reasonable probability endanger public health; or

(iv) results in substantial damage to property or the environment;

(c) an unauthorized release of natural gases in excess of 500 mcf; or

(d) a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in Section 19, Subsection B, Paragraphs (1) and (2) or (3) of 19.15.1 NMAC.

(2) A Minor Release shall be reported by giving timely written notice pursuant to Subsection C, Paragraph (2) of 19.15.3.116 NMAC. A Minor Release is an unauthorized release of a volume, greater than 5 barrels but not more than 25 barrels; or greater than 50 mcf but less than 500 mcf of natural gases.

C. Contents Of Notification

(1) Immediate verbal notification required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery to the division district office for the area within which the release takes place. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief. This notification shall provide the information required on division Form C-141.

(2) Timely written notification is required to be reported pursuant to Subsection B of 19.15.3.116 NMAC within fifteen (15) days to the division district office for the area within which the release takes place by completing and filing division Form C-141. In addition, timely written notification required pursuant to Subsection B, Paragraph (1), Subparagraph (d) of 19.15.3.116 NMAC shall also be reported to the division's Environmental Bureau Chief within fifteen (15) days after the release is discovered. The written notification shall verify the prior verbal notification and provide any appropriate additions or corrections to the information contained in the prior verbal notification.

D. Corrective Action. The responsible person must complete division approved corrective action for releases which endanger public health or the environment. Releases will be addressed in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC.

[1-1-50...5-22-73...2-1-96; A, 3-15-97; 19.15.3.116 NMAC - Rn, 19 NMAC 15.C.116, 11-15-01]

19.15.3.117 WELL LOG, COMPLETION AND WORKOVER REPORTS: Within 20 days after the completion of a well drilled for oil or gas, or the recompletion of a well into a different common source of supply, a completion report shall be filed with the division on Form C-105. For the purpose of Section 117 of 19.15.3 NMAC, any hole drilled or cored below fresh water or which penetrates oil- or gas-bearing formations or which is drilled by an "owner" as defined herein shall be presumed to be a well drilled for oil or gas.

[1-1-50...2-1-96; 19.15.3.117 NMAC - Rn, 19 NMAC 15.C.117, 11-15-01]

19.15.3.118 HYDROGEN SULFIDE GAS (HYDROGEN SULFIDE):

A. Applicability. This section applies to any person, operator or facility subject to the jurisdiction of the division, including, but not limited to, any person, operator or facility engaged in drilling, stimulating, injecting into, completing, working over or producing any oil, natural gas or carbon dioxide well or any person, operator or facility engaged in gathering, transporting, storing, processing or refining of crude oil, natural gas or carbon dioxide (referred to herein as "person, operator or facility" or "well, facility or operation"). This section shall not act to exempt or otherwise excuse surface waste management facilities permitted by the division pursuant to 19.15.9.711 NMAC from more stringent conditions on the handling of hydrogen sulfide required of such facilities by 19.15.9.711 NMAC or more stringent conditions in permits issued thereunder, nor shall such facilities be exempt or otherwise excused from the requirements set forth in this section by virtue of permitting under 19.15.9.711 NMAC.

B. Definitions (specific to this section).

(1) ANSI. The acronym "ANSI" means the American national standards institute.

(2) API. The acronym "API" means the American petroleum institute.

(3) Area of Exposure. The phrase "area of exposure" means the area within a circle constructed with a point of escape at its center and the radius of exposure as its radius.

(4) ASTM. The acronym "ASTM" means the American society for testing and materials.

(5) Dispersion Technique. A "dispersion technique" is a mathematical representation of the physical and chemical transportation characteristics, dilution characteristics and transformation characteristics of hydrogen sulfide gas in the atmosphere.

(6) Escape Rate. The "escape rate" is the maximum volume (Q) that is used to designate the possible rate of escape of a gaseous mixture containing hydrogen sulfide, as set forth herein.

(a) For existing gas facilities or operations, the escape rate shall be calculated using the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof. For an existing gas well, the escape rate shall be calculated using the current daily absolute open flow rate against atmospheric pressure or the best estimate of that rate.

(b) For new gas operations or facilities, the escape rate shall be calculated as the maximum anticipated flow rate through the system. For a new gas well, the escape rate shall be calculated using the maximum open-flow rate of offset wells in the pool or reservoir, or the pool or reservoir average of maximum open-flow rates.

(c) For existing oil wells, the escape rate shall be calculated by multiplying the producing gas/oil ratio by the maximum daily production rate or the best estimate thereof.

(d) For new oil wells, the escape rate shall be calculated by multiplying the producing gas/oil ratio by the maximum daily production rate of offset wells in the pool or reservoir, or the pool or reservoir average of the producing gas/oil ratio multiplied by the maximum daily production rate.

(e) For facilities or operations not mentioned, the escape rate shall be calculated using the actual flow of the gaseous mixture through the system or the best estimate thereof.

(7) GPA. The acronym "GPA" means the gas processors association.

(8) LEPC. The acronym "LEPC" means the local emergency planning committee established pursuant to the emergency planning and community right-to-know act, 42 U.S.C. Section 11001.

(9) NACE. The acronym "NACE" refers to the national association of corrosion engineers.

(10) PPM. The acronym "ppm" means "parts per million" by volume.

(11) Potentially Hazardous Volume means the volume of hydrogen sulfide gas of such concentration that:

(a) the 100-ppm radius of exposure includes any public area;

(b) the 500-ppm radius of exposure includes any public road; or

(c) the 100-ppm radius of exposure exceeds 3,000 feet.

(12) Public Area. A "public area" is any building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business, church, school, hospital, or government building, or any portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present.

(13) Public Road. A "public road" is any federal, state, municipal or county road or highway.

(14) Radius of Exposure. The radius of exposure is that radius constructed with the point of escape as its starting point and its length calculated using the following Pasquill-Gifford derived equation, or by such other method as may be approved by the division:

(a) For determining the 100-ppm radius of exposure: $X= [(1.589)(\text{hydrogen sulfide concentration})(Q)]^{(0.6258)}$, where "X" is the radius of exposure in feet, the "hydrogen sulfide concentration" is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture, and "Q" is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psia and 60 degrees F).

(b) For determining the 500-ppm radius of exposure: $X=[(0.4546)(\text{hydrogen sulfide concentration})(Q)]^{(0.6258)}$, where "X" is the radius of exposure in feet, the "hydrogen sulfide concentration" is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture, and "Q" is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psia and 60 degrees F).

(c) For a well being drilled, completed, recompleted, worked over or serviced in an area where insufficient data exists to calculate a radius of exposure but where hydrogen sulfide could reasonably be expected to be present in concentrations in excess of 100 ppm in the gaseous mixture, a 100-ppm radius of exposure equal to

3,000 feet shall be assumed.

C. Regulatory Threshold.

(1) Determination of Hydrogen Sulfide Concentration.

(a) Each person, operator or facility shall determine the hydrogen sulfide concentration in the gaseous mixture within each of its wells, facilities or operations either by testing (using a sample from each well, facility or operation), testing a representative sample, or using process knowledge in lieu of testing. If a representative sample or process knowledge is used, the concentration derived from the representative sample or process knowledge must be reasonably representative of the hydrogen sulfide concentration within the well, facility or operation.

(b) The tests used to make the determination referred to in the previous subparagraph shall be conducted in accordance with applicable ASTM or GPA standards or by another method approved by the division.

(c) If a test was conducted prior to the effective date of this section that otherwise meets the requirements of the previous subparagraphs, new testing shall not be required.

(d) If any change or alteration may materially increase the concentration of hydrogen sulfide in a well, facility or operation, a new determination shall be required in accordance with this section.

(2) Concentrations Determined to be Below 100 ppm. If the concentration of hydrogen sulfide in a given well, facility or operation is less than 100 ppm, no further actions shall be required pursuant to this section.

(3) Concentrations Determined to be Above 100 ppm.

(a) If the concentration of hydrogen sulfide in a given well, facility or operation is determined to be 100 ppm or greater, then the person, operator or facility must calculate the radius of exposure and comply with applicable requirements of this section.

(b) If calculation of the radius of exposure reveals that a potentially hazardous volume is present, the results of the determination of the hydrogen sulfide concentration and the calculation of the radius of exposure shall be provided to the division. For a well, facility or operation existing on the effective date of this section, the determination, calculation and submission required herein shall be accomplished within 180 days of the effective date of this section; for any well, facility or operation that commences operations after the effective date of this section, the determination, calculation and submission required herein shall be accomplished before operations begin.

(4) Recalculation. The person, operator or facility shall calculate the radius of exposure if the hydrogen sulfide concentration in a well, facility or operation increases to 100 ppm or greater. The person, operator or facility shall also recalculate the radius of exposure if the actual volume fraction of hydrogen sulfide increases by a factor of twenty-five percent in a well, facility or operation that previously had a hydrogen sulfide concentration of 100 ppm or greater. If calculation or recalculation of the radius of exposure reveals that a potentially hazardous volume is present, the results shall be provided to the division within sixty (60) days.

D. Hydrogen Sulfide Contingency Plan.

(1) When Required. If a well, facility or operation involves a potentially hazardous volume of hydrogen sulfide, a hydrogen sulfide contingency plan that will be used to alert and protect the public must be developed in accordance with the following paragraphs.

(2) Plan Contents.

(a) API Guidelines. The hydrogen sulfide contingency plan shall be developed with due consideration of paragraph 7.6 of the guidelines published by the API in its publication entitled "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP-55, most recent edition, or with due consideration to another standard approved by the division.

(b) Required Contents. The hydrogen sulfide contingency plan shall contain, but shall not be limited to, information on the following subjects, as appropriate to the well, facility or operation to which it applies:

(i) Emergency procedures. The hydrogen sulfide contingency plan shall contain information on emergency procedures to be followed in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in the previous subsubparagraph, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of any road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans. The plan shall include information on the availability and location of necessary safety equipment and supplies.

(ii) Characteristics of hydrogen sulfide and sulfur dioxide. The hydrogen sulfide

contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide.

(iii) Maps and drawings. The hydrogen sulfide contingency plan shall include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure.

(iv) Training and Drills. The hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills or exercises that simulate a release, and shall describe how the training, drills and attendance will be documented. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans.

(v) Coordination with State Emergency Plans. The hydrogen sulfide contingency plan shall describe how emergency response actions under the plan will be coordinated with the division and with the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan (HMER).

(vi) Activation Levels. The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level.

(3) Plan Activation. The hydrogen sulfide contingency plan shall be activated when a release creates a concentration of hydrogen sulfide greater than the activation level set forth in the hydrogen sulfide contingency plan. At a minimum, the plan must be activated whenever a release may create a concentration of hydrogen sulfide of more than 100 ppm in any public area, 500 ppm at any public road or 100 ppm 3,000 feet from the site of release.

(4) Submission.

(a) Where Submitted. The hydrogen sulfide contingency plan shall be submitted to the division.

(b) When Submitted. A hydrogen sulfide contingency plan for a well, facility or operation existing on the effective date of this section shall be submitted within one year of the effective date of this section. A hydrogen sulfide contingency plan for a new well, facility or operation shall be submitted before operations commence. The hydrogen sulfide contingency plan for a drilling, completion, workover or well servicing operation must be on file with the division before operations commence and may be submitted separately or along with the application for permit to drill (APD) or may be on file from a previous submission. A hydrogen sulfide contingency plan shall also be submitted within 180 days after the person, operator or facility becomes aware or should have become aware that a public area or public road is established that creates a potentially hazardous volume where none previously existed.

(c) Electronic Submission. Any filer who operates more than one hundred wells or who operates a crude oil pump station, compressor station, refinery or gas plant must submit each hydrogen sulfide contingency plan in electronic format. The hydrogen sulfide contingency plan may be submitted through electronic mail, through an Internet filing or by delivering electronic media to the division, so long as the electronic submission is compatible with the division's systems.

(5) Failure to Submit Plan. Failure to submit a hydrogen sulfide contingency plan when required may result in denial of an application for permit to drill, cancellation of an allowable for the subject well or other enforcement action appropriate to the well, facility or operation.

(6) Review, Amendment. The person, operator or facility shall review the hydrogen sulfide contingency plan any time a subject addressed in the plan materially changes and make appropriate amendments. If the division determines that a hydrogen sulfide contingency plan is inadequate to protect public safety, the division may require the person, operator or facility to add provisions to the plan or amend the plan as necessary to protect public safety.

(7) Retention and Inspection. The hydrogen sulfide contingency plan shall be reasonably accessible in the event of a release, maintained on file at all times, and available for inspection by the division.

(8) Annual Inventory of Contingency Plans. On an annual basis, each person, operator or facility required to prepare one or more hydrogen sulfide contingency plans pursuant to this section shall file with the appropriate local emergency planning committee and the state emergency response commission an inventory of the wells, facilities and operations for which plans are on file with the division and the name, address and telephone number of a point of contact.

(9) Plans Required by Other Jurisdictions. A hydrogen sulfide contingency plan required by the Bureau of Land Management or other jurisdiction that meets the requirements of this subsection may be submitted to the division in satisfaction of this subsection.

E. Signage, Markers. For each well, facility or operation involving a concentration of hydrogen

sulfide of 100 ppm or greater, signs and/or markers shall be installed and maintained. Each sign or marker shall conform with the current ANSI standard Z535.1-2002 ("Safety Color Code"), or some other standard approved by the division, shall be readily readable, and shall contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. Signs or markers shall be prominently posted at locations, including but not limited to entrance points and road crossings, sufficient to alert the public that a potential danger exists. Signs and/or markers that conform with this subsection shall be installed no later than one year from the effective date of this section.

F. Protection from Hydrogen Sulfide During Drilling, Completion, Workover, and Well Servicing Operations.

(1) API Standards. All drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall be conducted with due consideration to the guidelines published by the API entitled "Recommended Practice for Oil and Gas Well Servicing and Workover Operations Involving Hydrogen Sulfide," RP-68, and "Recommended Practices for Drilling and Well Servicing Operations Involving Wells Containing Hydrogen Sulfide," RP-49, most recent editions, or some other standard approved by the division.

(2) Detection and Monitoring Equipment. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall include hydrogen sulfide detection and monitoring equipment as follows:

(a) Each drilling and completion site shall have an accurate and precise hydrogen sulfide detection and monitoring system that will automatically activate visible and audible alarms when the ambient air concentration of hydrogen sulfide reaches a predetermined value set by the operator, not to exceed 20 ppm. There shall be a sensing point located at the shale shaker, rig floor and bell nipple for a drilling site and the cellar, rig floor and circulating tanks or shale shaker for a completion site.

(b) For workover and well servicing operations, one operational sensing point shall be located as close to the well bore as practical. Additional sensing points may be necessary for large or long-term operations.

(c) Hydrogen sulfide detection and monitoring equipment must be provided and must be made operational during drilling when drilling is within 500 feet of a zone anticipated to contain hydrogen sulfide and continuously thereafter through all subsequent drilling.

(3) Wind Indicators. All drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall include wind indicators. Equipment to indicate wind direction shall be present and visible at all times. At least two devices to indicate wind direction shall be installed at separate elevations and visible from all principal working areas at all times. When a sustained concentration of hydrogen sulfide is detected in excess of 20 ppm at any detection point, red flags shall be displayed.

(4) Flare System. For drilling and completion operations in an area where it is reasonably expected that a potentially hazardous volume of hydrogen sulfide will be encountered, the person, operator or facility shall install a flare system to safely gather and burn hydrogen-sulfide-bearing gas. Flare outlets shall be located at least 150 feet from the well bore. Flare lines shall be as straight as practical. The flare system shall be equipped with a suitable and safe means of ignition. Where noncombustible gas is to be flared, the system shall provide supplemental fuel to maintain ignition.

(5) Well Control Equipment. When the 100 ppm radius of exposure includes a public area, the following well control equipment shall be required:

(a) Drilling. A remote-controlled well control system shall be installed and operational at all times beginning when drilling is within 500 feet of the formation believed to contain hydrogen sulfide and continuously thereafter during drilling. The well control system must include, at a minimum, a pressure and hydrogen-sulfide-rated well control choke and kill system including manifold and blowout preventer that meets or exceeds the specifications API-16C and API-RP 53 or other specifications approved by the division. Mud-gas separators shall be used. These systems shall be tested and maintained pursuant to the specifications referenced, according to the requirements of this part, or otherwise as approved by the division.

(b) Completion, Workover and Well Servicing. A remote controlled pressure and hydrogen-sulfide-rated well control system that meets or exceeds API specifications or other specifications approved by the division shall be installed and shall be operational at all times during completion, workover and servicing of a well.

(6) Mud Program. All drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall use a hydrogen sulfide mud program capable of handling hydrogen sulfide conditions and well control, including de-gassing.

(7) Well Testing. Except with prior approval of the division, drill-stem testing of a zone that contains

hydrogen sulfide in a concentration of 100 ppm or greater shall be conducted only during daylight hours and formation fluids shall not be permitted to flow to the surface.

(8) If Hydrogen Sulfide Encountered During Operations. If hydrogen sulfide was not anticipated at the time the division issued a permit to drill but is encountered during drilling in a concentration of 100 ppm or greater, the operator must satisfy the requirements of this section before continuing drilling operations. The operator shall notify the division of the event and the mitigating steps that have been or are being taken as soon as possible, but no later than 24 hours following discovery. The division may grant verbal approval to continue drilling operations pending preparation of any required hydrogen sulfide contingency plan.

G. Protection from Hydrogen Sulfide at Crude Oil Pump Stations, Producing Wells, Tank Batteries and Associated Production Facilities, Pipelines, Refineries, Gas Plants and Compressor Stations.

(1) API Standards. Operations at crude oil pump stations and producing wells, tank batteries and associated production facilities, refineries, gas plants and compressor stations involving a concentration of hydrogen sulfide of 100 ppm or greater shall be conducted with due consideration to the guidelines published by the API in its publication entitled "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP-55, latest edition or some other standard approved by the division.

(2) Security. Well sites and other unattended, fixed surface facilities involving a concentration of hydrogen sulfide of 100 ppm or greater shall be protected from public access by fencing with locking gates when the location is within 1/4 mile of a public area. A surface pipeline shall not be considered a fixed surface facility for purposes of this paragraph.

(3) Wind Direction Indicators. All crude oil pump stations, producing wells, tank batteries and associated production facilities, pipelines, refineries, gas plants and compressor stations involving a concentration of hydrogen sulfide of 100 ppm or greater shall have equipment to indicate wind direction. The wind direction equipment shall be installed and visible from all principal working areas at all times.

(4) Control Equipment. When the 100 ppm radius of exposure includes a public area, the following additional measures are required:

(a) Safety devices, such as automatic shut-down devices, shall be installed and maintained in good operating condition to prevent the escape of hydrogen sulfide. Alternatively, safety procedures shall be established to achieve the same purpose.

(b) Any well shall possess a secondary means of immediate well control through the use of an appropriate christmas tree or downhole completion equipment. Such equipment shall allow downhole accessibility (reentry) under pressure for permanent well control.

(5) Tanks or vessels. Each stair or ladder leading to the top of any tank or vessel containing 300 ppm or more of hydrogen sulfide in the gaseous mixture shall be chained or marked to restrict entry.

(6) Compliance Schedule. Each existing crude oil pump station, producing well, tank battery and associated production facility, pipeline, refinery, gas plant and compressor station not currently meeting the requirements of this subsection shall be brought into compliance within one year of the effective date of this section.

H. Personnel Protection and Training. All persons responsible for the implementation of any hydrogen sulfide contingency plan shall be provided training in hydrogen sulfide hazards, detection, personal protection and contingency procedures.

I. Standards for Equipment That May Be Exposed to Hydrogen Sulfide. Whenever a well, facility or operation involves a potentially hazardous volume of hydrogen sulfide, equipment shall be selected with consideration for both the hydrogen sulfide working environment and anticipated stresses and NACE Standard MR0175 (latest edition) or some other standard approved by the division shall be used for selection of metallic equipment or, if applicable, adequate protection by chemical inhibition or other methods that control or limit the corrosive effects of hydrogen sulfide shall be used.

J. Exemptions. Any person, operator or facility may petition the director or the director's designee for an exemption to any requirement of this section. Any such petition shall provide specific information as to the circumstances that warrant approval of the exemption requested and how the public safety will be protected. The director or the director's designee, after considering all relevant factors, may approve an exemption if the circumstances warrant and so long as the public safety will be protected.

K. Notification of the Division. The person, operator or facility shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supercede notification. The person, operator or facility shall submit a full report of the incident to the division on Form C-141 no later than fifteen (15) days following the release.

[5-22-73...1-1-87...2-1-96; A 3-15-97; 19.15.3.118 NMAC - Rn, 19 NMAC 15.C.118, 11-15-2001; A, 01-31-03]

History of 19.15.3 NMAC:
Pre-NMAC History:
Material in this part was derived from that previously filed with the commission of public records - state records center and archives as:
Rule 101, Plugging Bond, filed 06-04-86;
Rule 101, Plugging Bond, filed 01-06-88;
Rule 101, Plugging Bond, filed 02-05-91;
Rule 102, Notice of Intention to Drill, filed 01-08-82;
Rule 102, Notice of Intention to Drill, filed 11-25-85;
Rule 102, Notice of Intention to Drill, filed 02-05-91;
Rule 103, Sign on Wells, filed 01-08-82;
Rule 103, Sign on Wells, filed 02-05-91;
Rule 104, Well Spacing: Acreage Requirements for Drilling Tracts, filed 01-08-82;
Rule 104, Well Spacing: Acreage Requirements for Drilling Tracts, filed 02-05-91;
Rule 105, Pit for Clay, Shale, and Drill Cutting, filed 01-08-82;
Rule 105, Pit for Clay, Shale, and Drill Cutting, filed 08-17-89;
Rule 105, Pit for Clay, Shale, and Drill Cutting, filed 02-05-91;
Rule 106, Sealing Off Strata, filed 01-08-82;
Rule 106, Sealing Off Strata, filed 10-11-89;
Rule 106, Sealing Off Strata, filed 02-05-91;
Rule 107, Casing and Tubing Requirements, filed 01-08-82;
Rule 107, Casing and Tubing Requirements, filed 02-05-91;
Rule 108, Defective Casing or Cementing, filed 01-08-82;
Rule 108, Defective Casing or Cementing, filed 09-16-85;
Rule 108, Defective Casing or Cementing, filed 02-05-91;
Rule 109, Blowout Prevention, filed 01-27-82;
Rule 109, Blowout Prevention, filed 02-05-91;
Rule 110, Pulling Outside Strings of Casing, filed 01-27-82;
Rule 110, Pulling Outside Strings of Casing, filed 02-05-91;
Rule 111, Deviation Tests and Directional Drilling, filed 01-08-82;
Rule 111, Deviation Tests and Directional Drilling, filed 09-16-85;
Rule 111, Deviation Tests and Directional Drilling, filed 10-11-89;
Rule 111, Deviation Tests and Directional Drilling, filed 02-05-91;
Rule 111, Deviation Tests/Deviated Wells and Directional Drilling, filed 07-27-95;
Rule 112-A, Multiple Completions, filed 01-08-82;
Rule 112-A, Multiple Completions, filed 02-05-91;
Rule 112-B, Brandenhead Gas Wells, filed 01-08-82;
Rule 112-B, Brandenhead Gas Wells, filed 02-05-91;
Rule 113, Shooting and Chemical Treatment of Wells, filed 01-08-82;
Rule 113, Shooting and Chemical Treatment of Wells, filed 09-16-85.
Rule 113, Shooting and Chemical Treatment of Wells, filed 02-05-91.
Rule 114, Safety Regulations, filed 01-08-82;
Rule 114, Safety Regulations, filed 02-05-91.
Rule 115, Well and Lease Equipment, filed 01-08-82;
Rule 115, Well and Lease Equipment, filed 02-05-91.
Rule 116, Notification of Fire, Breaks, Leaks, Spills, and Blowouts, filed 01-08-82;
Rule 116, Notification of Fire, Breaks, Leaks, Spills, and Blowouts, filed 02-05-91;
Rule 117, Well Log, Completion and Workover Reports, filed 01-08-82;
Rule 117, Well Log, Completion and Workover Reports, filed 10-11-89;
Rule 117, Well Log, Completion and Workover Reports, filed 02-05-91;
Rule 118, Hydrogen Sulfide Gas - Public Safety, filed 12-30-86;
Rule 118, Hydrogen Sulfide Gas - Public Safety, filed 10-11-89;
Rule 118, Hydrogen Sulfide Gas - Public Safety, filed 02-05-91.

History of Repealed Material: [Reserved]

Other History:
Rule 101, filed 02-05-91; Rule 102, filed 02-05-91; Rule 103, filed 02-05-91; Rule 104, filed 02-05-91; Rule 105, filed 02-05-91; Rule 106, filed 02-05-91; Rule 107, filed 02-05-91; Rule 108, filed 02-05-91; Rule 109, filed 02-05-91; Rule 110, filed 02-05-91; Rule 111, filed 07-27-95; Rule 112-A, filed 02-05-91; Rule 112-B, filed 02-05-91; Rule 113, filed 02-05-91; Rule 114, filed 02-05-91; Rule 115, filed 02-05-91; Rule 116, filed 02-05-91; Rule 117, filed 02-05-91; Rule 118, filed 02-05-91; all renumbered, reformatted to and replaced by 19 NMAC 15.C, Drilling, filed 01-18-96.
19 NMAC 15.C, Drilling, filed 01-18-96; renumbered, reformatted and replaced by 19.15.3 NMAC, effective 11-15-01.

ATTACHMENT TO THE DISCHARGE PLAN RENEWAL GW-269
SID RICHARDSON ENERGY SERVICES, LTD.
BOYD COMPRESSOR STATION
DISCHARGE PLAN APPROVAL CONDITIONS
(January 9, 2002)

1. Payment of Discharge Plan Fees: The $100.00 filing fee has been received by the OCD. There is a flat fee assessed for natural gas compressor stations with horsepower rating less than 1000 horsepower equal to $400.00. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Sid Richardson Energy Services, Ltd. Commitments: Sid Richardson Energy Services, Ltd. will abide by all commitments submitted in the discharge plan renewal application dated October 19, 2001 and these conditions for approval.

3. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

4. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

5. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

6. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

7. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

8. Labeling: All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

9. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity every 5 years. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

11. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

12. Housekeeping: All systems designed for spill collection/prevention will be inspected by a Sid Richardson Energy Services, Ltd.'s representative on a regular basis and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained for a period of five years.

13. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Hobbs District Office.

14. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. Storm Water Plan: The facility will have an approved storm water run-off plan.

16. Closure: The OCD will be notified when operations of the Boyd Compressor Station are discontinued for a period in excess of six months. Prior to closure of the Boyd Compressor Station a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

17. Certification: Sid Richardson Energy Services, Ltd., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Sid Richardson Energy Services, Ltd. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

SID RICHARDSON ENERGY SERVICES, LTD.

by Wayne J. Farley
Title

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-269) – Sid Richardson Energy Services, Inc., Mr. Wayne J. Farley, 201 Main Street, Suite 3000, Fort Worth, Texas 76102-3131, has submitted a discharge plan renewal application for their Boyd Compressor Station located in the NE/4 SE/4, Section 26, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico. Approximately 30 gallons per day of waste water will be stored on site in closed top bermed tanks. Fluids will be processed and hydrocarbons will be separated prior to waste water being transported to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 37 feet with a total dissolved solids concentrations of approximately 1100 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

(GW-270) – Sid Richardson Energy Services, Inc., Mr. Wayne J. Farley, 201 Main Street, Suite 3000, Fort Worth, Texas 76102-3131, has submitted a discharge plan renewal application for their West Eunice Compressor Station located in the SE/4 SE/4, Section 36, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico. Approximately 60 gallons per week of waste water will be stored on site in closed top bermed tanks. Fluids will be processed and hydrocarbons will be separated prior to waste water being transported to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 100 feet with a total dissolved solids concentrations of approximately 1100 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 14th day of November, 2001.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director

SID RICHARDSON GASOLINE CO.
201 MAIN STREET, SUITE 3000
FORT WORTH, TEXAS 76102

ROBERT L. GAWLIK
ENVIRONMENTAL HEALTH
& SAFETY ASSOCIATE

817/390-8600

January 6, 1997

CERTIFIED MAIL - RETURN RECEIPT
Z 378 134 317

Mr. William J. LeMay
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Discharge Plans
GW-269 Boyd Compressor Station
GW-270 West Eunice Compressor Station
Lea County, New Mexico

Dear Mr. LeMay:

Attached are signed copies of the NMOCD's Conditions of Approval for Discharge Plans GW-269 and GW-270 (Boyd Compressor Station and West Eunice Compressor Station, respectively).

We appreciate your time and attention to this matter. If there should be any further questions, please do not hesitate to call.

Sincerely,

Robert L. Gawlik
Environmental Health & Safety Associate

RLG:gad
Attachments

cc: C. P. O'Farrell/H. Harless - w/attachments
W. J. Farley - w/attachments
K. C. Clark - w/attachments
H. E. Hicks - w/attachments
Wayne Price (NMOCD - Hobbs) - w/attachments