GW - 7

GENERAL CORRESPONDENCE

YEAR(S):

1991-1982

El Paso Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

March 27, 1991

David G. Boyer, Hydrogeologist
Environmental Bureau Chief
New Mexico Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504

Subject: Request for Extension of Time to Close or Repair Two Brine Storage Ponds at EPNG's Jal No. 4 Plant

Dear Mr. Boyer:

Please consider this letter to be a written follow-up to our meeting in Santa Fe on March 14, 1991. During that meeting we discussed the status of the subject ponds and the fact that a purchase offer has been extended to EPNG by Christie Gas Corporation. The offer includes the gas injection wells, brine ponds, and "B" gasoline plant. The purchase is to be on an "as is" basis.

Given the current status of the two ponds, it is EPNG's belief that there is no threat to the groundwater from the ponds as long as the water level in the north pond is kept below a prescribed level, and any water that accumulates in the south pond is pumped out. Thus, EPNG is requesting OCD approval to leave the two ponds in their current status for a period not to exceed 90 days beyond the closing date of the sale. It is anticipated that the closing date for the purchase of the facilities will be May 1, 1991. Christie Gas Corp. met with contractors on March 26, 1991, to obtain a cost estimate for the repair of the brine pits.

If, for some reason, the facilities are not sold, EPNG will immediately begin pond closure activities. If you have any questions concerning the ponds at Jal No. 4, please feel free to contact me at 915/541-2323.

Sincerely,

Philip L. Baca, P.E.
Sr. Compliance Engineer

PLB:asg

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 10 AM	Date 7/17/91

Originating Party	Other Parties
Joe Christie (512) 327-9510	Dave Boyer OCD

Subject: Repair of Jal 4 Brine Ponds

Discussion: (1) Plan to liquify salt in S. Pond and transfer to frac tanks or N. Pond (2) Fill pond w/water and test (3) Drain and patch. SW Research Inc. to do work. Repeat for North Pond.

I told him procedure is fine but that leak detection, sumps must be kept drained during procedure.

Christie has ER&I lined up for the 25th this month

Conclusions or Agreements: Christie will send FAX with planned work to include sump monitoring. I will review and send authorization before end of week with conditions if necessary

Distribution: Jal 4 Christie File

Signed: D Boyer

DISCHARGE PLAN FOR

SID RICHARDSON CARBON & GASOLINE COMPANY'S

JAL NO. 4 PLANT - COMPRESSION FACILITY

LEA COUNTY, NEW MEXICO

Prepared By:

Sid Richardson Carbon & Gasoline Company

Fort Worth, Texas

January 1992

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Appendices

A. Facility Site Plan

B. Drain System Flow Schematic

C. Drain System Plan

D. Procedures for Testing Drains

E. Analysis of Ground Water

F. MSDS of All Chemicals Used at Jal #4

G. Hauling/Disposal Contractors

I. GENERAL INFORMATION

A. Identity of Discharger

Sid Richardson Carbon and Gasoline Company
201 Main Street
Fort Worth, Texas 76102
Telephone: AC (817) 390-8686

B. Local Representative

Mr. K. Curtis Clark, Plant Manager
Sid Richardson Carbon and Gasoline Company
Jal #3 Gasoline Plant
P. O. Box 1311
Jal, New Mexico 88252
Telephone: AC (505) 395-2068

C. Location of Discharge

Jal #4 Gasoline Plant
10 miles North of Jal, New Mexico, on Hwy. #18. The plant consists of one 36.364 acre tract located in the SE 1/4 of Section 31, T-23-S, R-37-E, N.M.P.M., Lea County, New Mexico. See Appendix A for the Plot Plan.

D. Type of Natural Gas Operation

The major purpose of the Jal #4 Plant-Compressor Facility is compression of rich natural gas from the Lea County Gathering System - High and Low Pressure Systems.

Rich natural gas, condensate, water and other hydrocarbon liquids are separated in inlet scrubbers and the liquids are dumped to above ground storage tanks. The rich natural gas is then compressed from approximately 10 to 600 psig in three stages and leaves the plant. Interstage and after cooling of the gas results in additional water and hydrocarbon dropout. Produced liquids are removed in interstage and after scrubbers and then dumped to the field hydrocarbon separator operating at approximately 10 to 15 psig. Flashed vapors are then recycled to the inlet and the separated liquids are dumped to an above ground storage tank. Inlet and produced liquids contained in the storage tanks are sold and trucked off the site. The compression facility is currently operated on an intermittent as needed basis.

I. E. Affirmation

I hereby certify that I am familiar with the information contained in and submitted with this application and that such information is true, accurate and complete to the best of my knowledge and belief.

Wayne J. Farley
(Signature)

2/13/92
(Date)

Wayne J. Farley
(Name)

Manager, Gas Operations
(Title)

II. PLANT PROCESSES

A. Sources and Quantities of Effluent and Process Fluids

1. Compressors and Generators - The "A" Compressor building houses seven Cooper-Bessemer GMV-10 integral compressors and one Ingersoll-Rand KVS-412 integral compressor with a total site horsepower of 10,500. The Auxillary building houses three General Electric, 570 KW, generators powered by Ingersoll-Rand PKVG-8LZ engines (2442 site horsepower) and six jacket water circulating pumps. Both buildings contain floor drains which are connected to the Open Drain system (See Appendices B and C). The buildings have well maintained concrete floors and all drips, spills and washdown water will be contained in the buildings or diverted to the floor drains.

   The compressors and generator engines will be washed approximately once a year, using approximately 3000 gallons of raw water. Washdown water runoff will flow to the floor drains. The water will contain hydrocarbon from the lubricating oil and natural gas condensate.

   Compressor and generator engine lube oil will be changed only when required by periodic lube oil analysis, but not less than annually. Approximately 2750 gallons of waste oil will be disposed of annually. The oil will be collected and disposed of by an approved oil recycler. (See Appendix G)

   All GMV and PKVG engines use inhibited water in their jacket water and lube oil cooling systems. The total volume of water contained in the jacket water and lube oil cooling systems is 27,755 gallons and 11,214 gallons, respectively.

   The one KVS-412 has a separate jacket water and lube oil cooling system and uses Ambitrol CN as a coolant/antifreeze. The system contains 1,744 gallons as jacket coolant and 804 gallons as lube oil coolant.

   New engine oil will be stored on-site in two 210 barrel steel tanks. Ambitrol CN will be stored on-site in a 50 barrel steel tank.

2. Scrubbers and Inlet Separators - Inlet scrubbers are located on the high and low pressure systems. The inlet scrubbers remove water and condensate from the inlet gas stream.

The high pressure system scrubbers (V6 & V6A) dump the liquids into the section of the closed drain system which is connected to Storage Tanks #22 and #33. Liquids from the low pressure inlet scrubber are dumped into the section of the closed drain system which is connected to the storage tank No. 29301, south of the plant.

The first stage compressor suction scrubber will collect any liquids which may condense downstream of the inlet scrubbers. The liquid will be dumped to the closed drain system connected to the storage tank No. 29301.

The first, second and third stage discharge scrubbers collect compression liquids and dump them to a section of the closed drain system which flows to the North Field Flash Separator. The compressor headers and gas coolers are also tied into this system. Liquids from the North Field Flash Separator are dumped to storage Tank No. 23 located with tanks #22 and #33. Hydrocarbon vapors are recycled to the inlet of the facility.

Liquids recovered and produced will vary with the season and the volume of gas being compressed by the facility. The predicted volume of liquids varies from 239 bbls/day in the winter to 210 bbls/day in the summer (65% hydrocarbon and 35% water).

3. Storage Tanks - Recovered hydrocarbon liquids and water are stored in four above ground steel storage tanks. Liquids flow to the tanks through the drain systems described in paragraphs 1 and 2 above. Tank No's. 23 and 33 are 410-barrel capacity and 22 is 436 barrel capacity; all are located on the north side of the plant. Tank No. 29301 is 500-barrel capacity and is located on the south side of the plant. All tanks set on a gravel pad.

Tank liquids will be approximately sixty-five percent hydrocarbon and the remainder water. Liquids will be pumped from the tanks on a regular basis by an approved disposal service.

Tanks are not currently bermed; however, berms will be constructed of sufficient size to contain 1-1/3 the volume of the tanks.

B. Quality Characteristics of Sources Listed in Section A

The Jal No. 4 facility is currently operated on an as needed basis and effluent samples have not been taken. When the facility is operational, samples will be taken when facility is recommissioned on full time basis. Samples will be taken and analyzed in accordance with current OCD and WQCC regulations.

Material Safety Data Sheets (MSDS) for all material used or encountered at Jal No. 4 are contained in Appendix F.

C. Transfer and Storage of Process Fluids and Effluents

Drainage System Flow schematic and Plan drawings indicating the flow within and location of the open and closed drain system are contained in Appendices B and C.

Drain testing procedures are contained in Appendix D. Drains will be tested on a periodic basis.

D. Spill/Leak Prevention and Housekeeping Procedures

When operational there will be one or more personnel at the plant full-time. While in a non-operational mode, the plant will be visited by a Sid Richardson employee on a daily basis. Leaks, spills, and drips will be handled as follows:

Small spills will be absorbed with soil and shoveled into drums for off-site disposal by an OCD-approved disposal contractor.

Large spills will be contained with temporary berms. Free liquids will be removed with a vacuum truck. Contaminated soil will be shoveled into drums for off-site disposal by an OCD-approved disposal contractor.

Verbal and written notification of leaks and spills will be made to OCD in accordance with OCD Rule 116.

All areas identified during operation as susceptible to spills or leaks will be paved, bermed, or otherwise contained to prevent the discharge of any effluents.

III. EFFLUENT DISPOSAL

A. Existing Operation

1. On-Site Facilities - There are no on-site facilities for effluent disposal.

2. Off-Site Disposal - All effluents will be trucked off-site and handled in accordance with OCD and NMED regulations. All effluents will be recycled is possible. Effluents which cannot be recycled, such as contaminated soil, will be disposed of.

   The recycling and disposal contractors used at Jal No. 4 will be approved by the New Mexico Environment Department or Oil Conservation Division, as appropriate, for the hauling and final disposition of effluents. A list of hauling/disposal contracts can be found in Appendix G.

B. Proposed Modifications

Since there are no on-site facilities for effluent disposal there are no proposed modifications.

IV. SITE CHARACTERISTICS

A. Hydrologic Features

1. Bodies of Water Near Plant Site - There are no bodies of water or groundwater discharge sites within one mile of the plant site. Water courses in the area are generally ephemeral washes. The plant gets its water from wells No. 13 and No. 16 located in Sec. 36, T-23-S, R-36-E.

2. Ground Water Most Likely Affected by Discharge - The Ogallala aquifer is the principal source of potable water in the area. The depth to the aquifer is unknown; the total dissolved solids (TDS) concentration for the groundwater most likely to be affected by the discharge is 331 mg/l (See Appendix E for complete Analysis of Sample from Well No. 16).

3. Flow Direction of Ground Water Most Likely Affected by Discharge - The Ogallala aquifer slopes to the southeast with a hydraulic gradient of about 10-12 feet per mile and imparts an easterly or southeasterly movement to the groundwater (Cronin, 1969) (EPNG Discharge Plan, March 1981).

B. Geologic Description of Discharge Site (EPNG Discharge Plan, March 1981).

1. Soil Types - The Jal No. 4 plant site is located on the Berino-Cacique loamy fine sands soil association and the Pyote and Maljamar soil series.

   The Pyote and Maljamar fine sands are well-drained soils with moderately rapid permeability formed in wind-deposited materials. The Pyote soil is fine sand over sandy loam subsoil to a depth of 48 to 60 inches where a fine sandy loam C horizon is encountered. The Maljamar fine sand soil series has a sandy clay loam subsoil with an indurated caliche horizon at approximately 50 inches.

   The Berino-Cacique association consists of approximately 50% Berino loamy fine sand and 40% Cacique loamy fine sand. Cacique soils occur only in association with Berino soils. Both Berino and Cacique soils are moderately permeable and have very slow runoff. The Berino soil has a light sandy clay loam subsoil with caliche at depths ranging from 29 to 60 inches. Cacique loamy fine sand is a shallow soil with indurated caliche at 20 to 34 inches.

2. Name of aquifer - The Ogallala formation is the principal source of potable ground-water in the area.

3. Composition of the aquifer material - The Ogallala formation is allevial consisting of sand, gravel, silt and clay.

4. Depth to rock at base of alluvium - The Ogallala overlies the relatively impermeable Chinle Formation; however, the depth is unknown.

C. Flood Protection

1. Flooding Potential - The plant is situated on the Pecos River Basin. The Basin in southern Lea County has no perennial streams, but there are a few ephemeral streams and broad shallow drainages that may flow following thunderstorms which are common during July and August. Most precipitation quickly soaks into the soil or evaporates. The land surface in the plant area has little relief, falling approximately 30 feet per mile to the east. Runoff from the area flows east to provide water to Cheyenne Draw, a north to south trending tributary of Monument Draw located to the east of the plant. The plant has a very low flooding potential.

2. Flood Protection Measures - The plant is bounded on the south by a major caliche road, a curbed asphalt street on the southwest side and a cinder block wall along the majority of the west side of the plant; very little surface water runs into the plant. Surface water can only run off the plant along the east fence. A four foot reinforced cinder block wall with a chain-link fence on top is planned to be installed along the east boundary of the plant and will prevent any potentially contaminated surface water from leaving the plant.

V. REFERENCES

1. Cronin, J. G., Ground Water in the Ogallala Formation in the Southern High Plains of Texas and New Mexico, Hydrologic Investigation Atlas HA-330, U.S. Geological Survey. Washington, D.C. 1969.

2. EPNG (El Paso Natural Gas Company) Discharge Plan, Jal No. 4 Plant, Lea County, New Mexico. March 1981.

DRAIN LINE TESTING PROCEDURE

for

SID RICHARDSON CARBON & GASOLINE CO.

JAL NO. 4 PLANT

LEA COUNTY, NEW MEXICO

January 7, 1991

SUMMARY

This drain line testing plan sets forth the methods and procedures which Sid Richardson Carbon & Gasoline Co. proposes to use to verify the integrity of the underground drain system at the Jal No. 4 Plant.

The purpose of this testing is to ensure that wastewater flowing through this piping system is contained and does not contribute to the degradation of groundwater quality in the general area of Jal No. 4 Plant.

Recordkeeping and reporting have been addressed in the General Instruction section. All charts, worksheets and resulting reports will be retained for a minimum of five years.

Detailed instructions are given for testing each major section of drain line. As each section is tested, all laterals (smaller drains) which flow into the main header will be subjected to the same test pressure. This will assure that all underground piping is tested.

Drain Line Testing Procedures for Jal No. 4 Plant

Introduction

The following procedures are arranged to allow testing of various sections of the drain system with the plant in operation.

The test sequence should be arranged so water from one section can be routed into the next section to be tested where possible. This should shorten filling time and provide more economical use of water.

Water used in testing will be raw water from the plant water system. Use of fire hydrants and hoses will be required in some locations to provide sufficient volume and pressure for filling and testing. In most cases, test pressures will be below normal line pressure in plant water mains making use of hydrostatic test pump unnecessary. The higher pressures will require a pump.

The test pressures and duration used in this procedure exceed those specified for drainage and vent systems as set forth in the 1979 ICBO Code, Sections 1004 (A) 1 and 1005. The International Conference of Building Officials (ICBO) Plumbing Code of the Uniform Plumbing Code describe the procedures to be utilized in this testing procedure. The pressures and duration required in the ICBO Code are 4.3 psi and 15 minutes, respectively.

General Instructions

1. Before attempting to test any section of drain line, verify the sources of effluent and vapors entering the line. Any line which will contain significant amounts of Hydrogen Sulfide (H_2S) will be opened and tested observing all prescribed safety precautions and procedures.

2. Line sizes, tap numbers and locations of valves are shown on drawing No. J4-D-001, "Drain System". The entire test procedure is directly related to information on this drawing.

3. All drain and block valves which are lubricated plug valves, should be lubricated in the closed position to minimize possibility of leakage.

4. Before installing expandable plugs, clean the interior portion of the pipe where plug seal will contact pipe wall to assure proper sealing.

5. Use new gaskets when installing blind plates in flange unions and tighten flange bolts evenly to prevent tilting of flange faces and leakage.

6. Filling a test section should always be from the lowest tap, venting at the higher taps to displace as much air or gas from the line as possible. Air or gas in the line, especially large amounts, may cause instability in pressure readings.

7. Test procedures given for each section to be tested are 10 p.s.i. above the maximum recorded pressure for that section of line. Test pressure should be applied only after system pressure is stabilized at some lower pressure.

8. After test pressure has been applied and stabilized, system will be isolated and test will last for (1) one hour. This is to be a static pressure test. Introduction of additional pressure will void previous time interval and will require restarting test.

9. If a section will not maintain the static test pressure for the required time, provided there is no valve, fitting or flange leakage, this section of drain line will be considered faulty. At this point it may be necessary to further isolate smaller sections of the line or expose the entire line until the leaking portion can be located and replaced or repaired.

    a. It should be noted that leakage can occur around the plug of a valve unless a sealing type grease is used to lubricate the valve in the closed position.

    b. Leakage will occur around the seal of an expandable plug unless the inside pipe surfaces are thoroughly cleaned prior to inserting the plug.

    c. Improper tightening of flange unions or faulty, used, or dirty gasket will cause leakage at the blind plate installations.

    d. Other points to check for system leakage are: loose screwed fittings and valves, stem packing (or bonnet) leakage on gate or globe valves, worn seating surfaces in ball valves, unseated gate or globe valves, and faulty resilient seats in butterfly valves.

10. Test pressures will be recorded on a circular chart which will be retained as a permanent record.

11. At the end of testing interval, remove the chart from the recorder before unscrewing the unit from the pressure tap to prevent irrelevant pen markings, ink spillage, or other chart damage.

12. Each chart will have the following information recorded on the back:

    a. Date
    b. Tap location
    c. Line Description
    d. Initials of person changing chart
    e. Signature of person supervising testing

    These charts will be retained at the plant office for reference and inspection as required.

13. When the integrity of the drain system, or a section of the system, has been verified, the system, or section, will be returned to normal service.

14. All drains will be tested periodically and a written report sent to the West Texas Area Manager with copies to Engineering and the file at the Plant.

15. The open drain collection point is open to the atmosphere and will be tested annually by filling with water and gauging any drop in level over a 4 hour period.

Line: 6"/8" Open Drain Line from "A" Compressor Building to Junction with 10" Open Drain Line.

1) a. Install threaded plug in South Basement drain line in "A" Compressor Building;

   b. Close valves on oil cooling water sidestream filter drain;

   c. Close valves on jacket water sidestream filter drain.

2) a. Install expandable plug in drain from containment apron No. 5;

   b. Install expandable plug in drain from containment apron No. 11;

   c. Install expandable plug in 6" drain from water treater backwash sump;

   d. Install expandable plug in drain from containment apron No. 9;

   e. Install expandable plugs in 2" drains in Auxiliary Building.

3) a. Install plug in 8" stopple fitting at junction with 10" water treater backwash drain line.

   b. Open valve at tap No. 14 for venting;

   c. Using tap F26 at 8" stopple fitting, fill system with water until all air/gas is displaced from line.

4) Install properly zeroed recorder on tap No. 14 then stabilize system pressure using fill tap F26.

5) Raise pressure to 20 psig on system, stabilize, then begin static pressure test as specified in General Instruction, Item 8.

6) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

7) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

8) Upon completion of test:

   a. Release test presure;

   b. Remove expandable and threaded plugs from:

      (1) 6" Water treater backwash sump drain;
      (2) Containment Apron No. 11;
      (3) Containment Apron No. 5;
      (4) Containment Apron No. 9;
      (5) South Basement drain in "A" Compressor Building
      (6) 2" Drains in Auxiliary Building

Line: 6"/8" Open Drain Line from "A" Compressor Building to Junction 10" Open Drain Line - Cont'd

c. Position drain valves at oil and jacket cooling water sidestream filters for normal operation.

d. Remove plug from 8" stopple fitting at junction with 10" water treater backwash line;

e. Close and plug all vent and fill taps.

9) Proceed to test on 10" water treater backwash line.

Line: 10" Open Drain Line - Section I

1) Close valve on 4" floor drain from "A" Compressor Building at junction with 10" open drain line near old "C" Compressor Inlet Regulator Run.

2) a. Install 10" expandable plug in drain line in water treater backwash sump;

   b. Install 10" expandable plug in drain line at open drain collection point;

3) a. Install plug in 8" stopple fitting at junction with "C" Compressor Plant open line near corner of block fence.

4) a. Open valve at Tap F27 for venting;

   b. Using Tap F29 at open drain collection point, fill system with water until all air is displaced from the line;

   c. Close valve at Tap F27.

5) Install properly zeroed recorder on Tap F27 then stabilize system pressure.

6) Raise pressure to 20 psig on system, stabilize test pressure then begin static pressure test as specified in General Instruction, Item 8.

7) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

8) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

9) Upon completion of test:

   a. Release test pressure;

   b. Remove expandable plugs from drain in water treater backwash sump.

   c. Remove plug from 8" stopple fitting at junction with 10" near block fence corner and secure;

   d. Open 4" valve in line from Compressor Building Drain;

   e. Close and plug all vent and fill valves.

Line: 4" Drain from "A" Compressor Building to 10" Line

1) a. Close 4" valve at west side of building near jacket water surge tank;

   b. Close 4" valve at junction with 10" open drain line near "C" Compressor Inlet Regulator Run;

   c. Close valve on drain from waste heat boiler blowdown drum;

   d. Close valves on drains from sample coolers.

2) a. Open valves on Taps F33 and F36 for venting;

   b. Using Tap F32 in 4" drain at junction with 10" drain, fill system with water until all air is displaced from the lines;

   c. Close valves at Taps F33 and F36.

3) Install properly zeroed recorder on Tap F32 then stabilize system pressure.

4) Raise pressure to 20 psig on system, stabilize test pressure then begin static pressure test as specified in General Instruction, Item 8.

5) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

   a. Release test pressure;

   b. Open 4" valve at junction with 10" drain;

   c. Open valves on waste heat boiler blowdown drum and sample coolers;

   d. Open 4" valves at west side of building near jacket water surge tank;

   e. Close and plug all vents and fill valves.

Line: 3" Closed Drain from 66" I.D. Low Pressure System Inlet Scrubber to South Storage Tank (Off-Site)

1) a. Close (2) 4" block valves on dump from inlet scrubber;

   b. Close 4" valve on pressure drain at junction with 3" drain to tank;

   c. Close 3" valve in line at hydrocarbon storage tanks;

   d. Lubricate in closed position 2" valve on (2) siphon drains on 24" and 30" headers and (1) valve on manual dump on inlet scrubber.

2) a. Open valve on Tap F40 near 3" valve at tanks;

   b. Open valve on Tap F41 on dump valve piping for venting;

   c. Using Tap F38 near 4" to 3" junction, fill system with water until all gas/air is displaced from lines;

   d. Close valves on Taps F40 and F41.

3) Install properly zeroed recorder on Tap F38 and stabilize system pressure.

4) Raise pressure to 20 psig on system, stabilize test pressure then begin static pressure test as specified in General Instruction, Item 8.

5) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

   a. Release test pressure;

   b. Open 3" valve in line at storage tank;

   c. Open 4" valve at 4" to 3" junction;

   d. Open (2) 4" valves on dump from inlet scrubber;

   e. Position 2" siphon drain valves, and 2" manual drain valves for normal operation;

   f. Close and plug all vents and fill valves.

Line: 4" Closed Drain from "C" Compressor Area to Junction with 3" Line to Off-Site South Storage Tank

1) a. Close (2) 2" block valves on dumps from "C" compressor inlet scrubber;

   b. Close (2) 4" block valves on dump from "A" compressor suction scrubber;

   c. Close 1" valve on sump pump discharge at the north end of "A" Compressor Building;

   d. Close 4" valve on closed drain line at junction with 3" line near 66" I.D. Low Pressure inlet scrubber.

2) a. Open valve on Tap F37 for venting;

   b. Open valve on Tap F39 at "A" compressor suction scrubber;

   c. Using Tap No. 21 at "C" compressor inlet scrubber, fill system with water until all air is displaced from lines;

   d. Close valves on Taps F37 and F39.

3) Install properly zeroed recorder on Tap F37 and stabilize system pressure.

4) Raise pressure to 20 psig on system, stabilize test pressure then begin static pressure test as specified in General Instruction, Item 8.

5) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

   a. Release test pressure;

   b. Open 4" valve at junction with 3" line near 66" I.D. Low Pressure inlet scrubber;

   c. Open (2) 2" block valves on dumps from "C" compressor inlet scrubber;

   d. Open 1" valve on sump pump discharge piping;

   e. Open block valve on dump from "A" Compressor Plant suction scrubber;

   f. Close and plug all vents and fill valves.

Line: 3" Closed Drain From Valve at Inlet Gas Cleaners (V6 & V6A) to East Field Hydrocarbon Separator North of Plant

1) a. Close 3" ball valve on line east of inlet gas cleaners;

   b. Close valve at inlet of east field hydrocarbon separator north of Plant.

2) a. Open valve at Tap F49, on hydrocarbon separator inlet piping, for venting;

   b. Using Tap F43, at 3" ball valve, fill system with water until all gas is displaced from the line;

   c. Close valve at Tap F49.

3) Install properly zeroed recorder on Tap F49 then stabilize system pressure using Tap F43.

4) Raise pressure to 80 psig on system, stabilize, then begin static pressure test as specified in General Instruction, Item 8.

5) If static test pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

   a. Release test pressure

   b. Open valve at inlet of east hydrocarbon separator;

   c. Open 3" ball valve in line, east of inlet gas cleaners;

   d. Close and plug all vents and fill valves.

Line: 4" Closed Drain to Hydrocarbon Separators and Tanks North of Plant

1) a. At south end of "A" compressor suction and discharge headers, lubricate (in the closed position) (5) 2" plug valves on siphon drains;

b. At the "A" compressor gas cooling fin-fan, lubricate (4) 2" drain valves on the bottom of the headers: (1) East side and (3) West side;

c. Close 2" block valve on dump at 3rd stage suction scrubber "A" compressor;

d. Close 2" block valves on dump at 2nd stage suction scrubber "A" compressor;

e. Lubricate 2" siphon drain valves on north end of 10" 3rd stage discharge header and 12" 3rd stage suction header;

f. Lubricate (3) 2" drain valves beneath north end of 16" 1st stage discharge, 16" 2nd stage suction and 12" 2nd stage discharge;

g. Close block valve on dump from 3rd stage discharge scrubber;

h. Close (2) 1" valves on ESD Valve Operator Volume Tanks;

i. Close valve on 1" line from 10" water leg at junction with 4" pressure drain header;

j. Install blind plate between 2" check valve and 2" ANSI 150 flange at southeast corner of 10" 2nd stage discharge header at "C" compressor gas cooling fin-fan;

k. Install blind plate between 2" check valve and 2" ANSI 150 flange in drain from 18" 1st stage discharge header at the northwest corner of "C" compressor fin-fan;

l. Close 2" block valve on dump from "C" Plant 2nd stage suction scrubber;

m. Lubricate 2" valve on siphon drain on 20" inlet gas line at inlet gas cleaners (V6 & V6A);

n. Close 3" ball valve (at transition in line size from 4" to 3") located east of inlet gas cleaners.

2) a. Open valve on Tap F42 at 3" ball valve, for venting;

b. Open valve on Tap F45 at east side of "A" compressor fin-fan;

c. Open valve on Tap F46 below block valve on dump from 2nd stage scrubber;

d. Using Tap No. 15, fill system with water until all air/gas is displaced from lines;

e. Close valves on Taps F42, F45 and F46.

3) Install properly zeroed recorder on Tap No. 22 and stabilize system pressure.

4) Raise pressure to 80 psig on system, stabilize test pressure then begin static pressure test as specified in General Instruction, Item 8.

5) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

a. Release test pressure;

b. Open 3" ball valve in line to hydrocarbon separator north of Plant;

c. Open 2" block valve on dump from "C" Plant 2nd stage suction scrubber;

d. Remove blind plates from lines at check valves at "C" compressor fin-fan;

e. Open 1" valve on drain line from 10" water leg at junction with 4" pressure drain header;

f. Position (2) 1" valves for normal operation on ESD Operator Volume Tanks;

g. Open block valve on dump from 3rd stage discharge scrubber;

h. Open 2" block valve on dump at "A" compressor 2nd stage scrubber;

i. Open 2" block valve on dump at "A" compressor 3rd stage suction scrubber;

8) Close and plug all vents and fill valves.

Line: 2"/4" Closed Drain from Open Drain Collection Point Pump to Field Storage Tanks No. 22 & 33

1) a. Close (2) 2" block valves on dumps from inlet gas scrubbers (V6 & V6A) and lubricate.

   b. Close valves on line at inlet to field Tanks No. 22 & 33.

2) a. Open valve on Tap F50, at Field Tank, for venting;

   b. Disconnect 2" piping at pump discharge and install plug with Tap.

   c. Using Tap at pump fill system with water until all gas is displaced from line.

3) Install properly zeroed recorder on Tap F50 then stabilize system pressure using Tap at pump.

4) Raise pressure to 50 psig on system, stabilize, then begin static pressure test as specified in General Instruction, Item 8.

5) If static pressure cannot be maintained as specified, refer to General Instruction, Item 9.

6) At the end of testing period, chart shall be removed and retained for permanent record and will be identified as indicated in General Instruction, Item 12.

7) Upon completion of test:

   a. Release test pressure;

   b. Open valve on line at inlet to Field Tank;

   c. Position block valves on dump from Stop Tank for normal operator;

   d. Close and plug vents and fill valves.

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

P.O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 or 563-1040

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

To: Mr. Larry Copeland
201 Main Street
Fort Worth, TX 76102

Laboratory No. 1091262 AA1016
Sample received 10-24-91
Results reported 11-4-91

Company: Sid Richardson Carbon & Gasoline Company
County: Lea, NM
Field:
Lease: Jal Plant #4

Subject: To make the determinations listed below on water sample from water supply well #16. Sample taken 10-24-91 by Tom Elrod, Martin Water Laboratories, Inc.

Determination	mg/l	EPA Maximum Contaminant Level for Drinking Water mg/l
Arsenic, as As	<0.01	0.05
Chromium, as Cr (Total)	<0.03	0.05
Copper, as Cu	<0.01	0.05
Lead, as Pb	<0.01	0.05
Mercury, as Hg	<0.002	0.002
Benzene	<0.005	0.005
Toluene	<0.005	--
Ethyl Benzene	<0.005	--
Total Xylenes	<0.005	--

NOTATION: Sampling procedure and test methods in compliance with U.S. Environmental Protection Agency Regulations (SW-846; Third Edition - Nov. 1986).

Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

W. Reagan White, B.S.

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 1091261
SAMPLE RECEIVED 10-24-91
RESULTS REPORTED 11-4-91

TO: Mr. Larry Copeland
201 Main Street, Fort Worth, TX 76102

COMPANY Sid Richardson Carbon & Gasoline LEASE Jal Plant #4
FIELD OR POOL Company
SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:
NO. 1 Raw water - taken from water supply well #16. 10-24-91
NO. 2 Maximum contents for drinking water as recommended by the Texas Dept. of Health.
NO. 3
NO. 4
REMARKS: Sample taken by Tom Elrod, Martin Water Laboratories, Inc.

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.				
pH When Sampled				
pH When Received	7.19			
Bicarbonate as HCO_3	215			
~~Solubility as CaCO3~~ Carbonate, as CO_3	0			
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$				
Calcium as Ca				
Magnesium as Mg				
Sodium and/or Potassium	44			
Sulfate as SO_4	51	300		
Chloride as Cl	23	300		
Iron as Fe	0.04	0.3		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated				
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide				
Resistivity, ohms/m at 77° F.				
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Nitrate, as N	0.8	10.0		
Potassium, as K	4			
Total Dissolved Solids @ 180°C.	331	1,000		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By W. Reagan White
W. Reagan White, B.S.

MATERIALS AT JAL #4 - COMPRESSION FACILITY

AMBITOL
METHANOL
CALGONS LCS-20T
CRUDE OIL
GASOLINE (UNLEADED)
HYDRAULIC FLUID
H_2S
K & W COPPER COAT
NATURAL GAS (SWEET)
NATURAL GAS (SOUR)
NATURAL GASOLINE
DRY NATURAL GAS
FIELD GAS (UNPROCESSED)
MARVEL MYSTERIAL OIL
MOBIL PEGASUS 390 OIL
SHELL TURBO OIL 46
SHELL TELLUS OIL 68
SHELL TURBO T OIL 220
SHELL CORENA K460 OIL
SHELL TURBO OIL 32
VARSOL 1
WD-40
FIRE EXTINGUISHING ANGENT

6/5/9[illegible] Meeting - Joe Christie, Charles C. Tom Wright, Rogg Howard Holder, Dave

Need updated maps w/ ownership.

Fractional use / Railhead / Truck

Bringing in Liquids

(1) To fix pits first - OK for plans to be submitted for Review
want

(2) Construction involving drains & sumps

Summary
(1) Plans & Specs for repair of roads
(2) Submit renewal letter and request to use LPG equipment

SOUTHWEST RESEARCH INSTITUTE

6220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, USA 78228-0510 • (512) 684-5111 • TELEX 244846

FYI
Anne

May 21, 1991

Joe Christie, President
Christie Gas Corporation
901 MoPac Expressway South, Suite 515
Austin, TX 78746

Reference: Leak Location Survey of Jal No. 4 South Brine Pond

Dear Mr. Christie:

I appreciate your call about leak location services for geomembrane liners of landfills and impoundments. The sensitive electrical leak location method we developed is the only known method to locate geomembrane leaks under a protective cover, without removing the soil cover. We are confident that our electrical leak location method is the best technology for locating leaks in geomembrane liners.

We have recently completed a survey of a brine pit similar to the Jal No. 4 South Brine Pond. It had two steel pipe penetrations and sediment. The pipe penetrations conducted most of the electrical current for the leak location survey, which made the leak detection sensitivity poor. The conductivity of the brine also decreased the sensitivity. We found that the only practical way to perform the survey was to clean and drain the pond, and cover the pipe penetrations with a sealed geomembrane liner. The pond was then filled with brine and the survey proceeded routinely. Thirty-four leaks were found in the seven-acre pond.

After reviewing the drawings you sent, we recommend this approach for the Jal No. 4 South Brine Pond. If necessary, some sediment left in the pond is acceptable, as long as it will allow a 1-inch-diameter probe to be moved freely through it. I made copies of the drawings that I will retain for future reference. Enclosed are the drawings you sent, with extra copies that you may need.

Southwest Research Institute does not repair the leaks in the liners. This is best done by a lining contractor who installs Hypalon (chlorosulfonated polyethylene). This contractor can also seal the pipe penetrations. I have enclosed a geomembrane liner selection chart published in *Pollution Equipment News* in April 1988. It lists nine installers of Hypalon, which is listed under materials as CS.

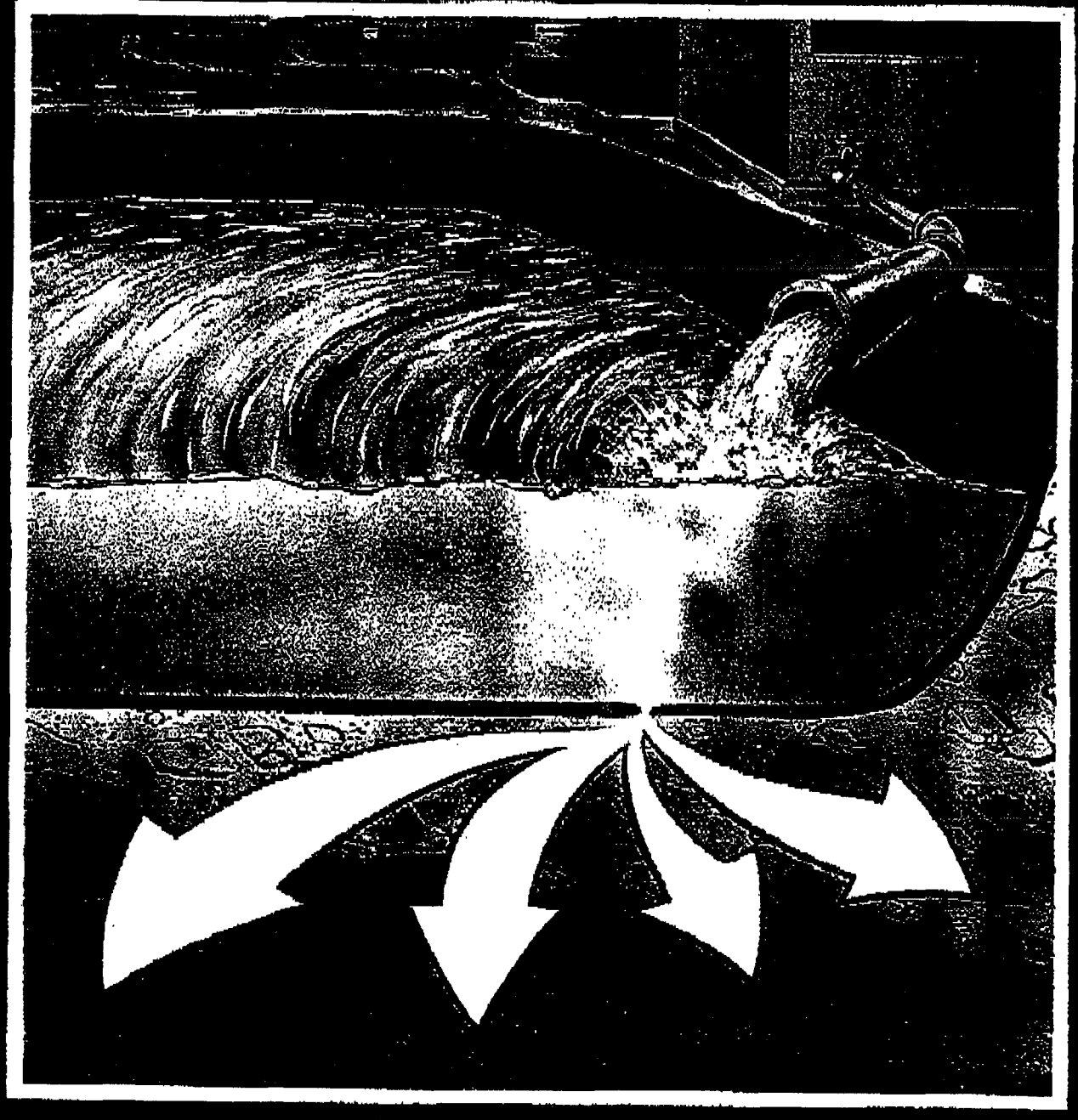
I have enclosed some technical papers and other materials describing the electrical leak location surveys and services. If you have any questions please contact me at (512) 522-2725 or Mr. Daren Laine, Senior Research Scientist at (512) 522-3274. We look forward to the opportunity to be of assistance to Christie Gas Corporation on this service requirement.

Very truly yours,

Glenn T. Darilek, Manager
Environmental and
Geophysical Applications

GTD/dl

Geomembrane Leak Location



Southwest Research Institute San Antonio, Texas

The electrical leak location method has become a highly successful means of locating leaks in the liners of landfills and surface impoundments built to hold hazardous and municipal wastes. Southwest Research Institute (SwRI) has investigated the integrity and performance of these geomembrane liners for environmental protection and safety since 1980. The Institute developed the electrical leak location method and other systems now extensively used for commercial surveys. Several of our innovative electrical leak location systems and methods have been awarded U.S. and foreign patents, and several additional patents are pending. Southwest Research Institute can assist clients in the design, installation, quality assurance, and remediation of any geomembrane-lined facility.

Leak Location Surveys

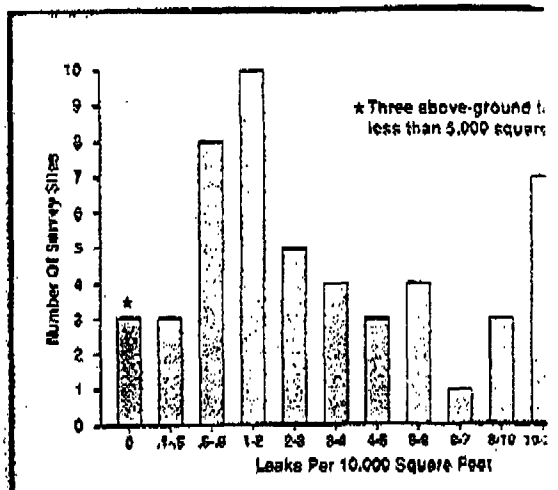
Commercial leak location surveys are provided to accurately locate leaks in geomembrane liners for repair to prevent contamination of the surrounding environment. A systematic scan of the entire submersed liner is performed using highly sensitive equipment. Any leaks found are marked on the liner or with weights attached to floats. Reports detail the location of each leak.

Important features and capabilities of the electrical leak location surveys include:

- ❑ Inspection of the parent material, and factory and field seams
- ❑ Locating leaks with an accuracy of 0.5 inch
- ❑ Detecting leaks as small as 0.001 square inches
- ❑ Survey speed of approximately 50,000 square feet per day with two-man crew
- ❑ Double-checking seams and patches
- ❑ Test of liner under hydrostatic loading
- ❑ Cost effective, most reliable leak location method

Types of surveys include:

- ❑ Pre-service inspections of landfills, impoundments, and lined tanks
- ❑ In-service inspections of impoundments and tanks with non-hazardous liquids
- ❑ Bottom and side-slope surveys
- ❑ Primary and secondary liners
- ❑ Surveys of soil-covered liners and landfill caps
- ❑ Small, remote-controlled boat for surveys of deep or hazardous impoundments
- ❑ Multi-channel system for large landfills and impoundments
- ❑ Third-party quality control inspections



Typical number of leaks found is from 0.5 to 40 10,000 square feet.

Surveys of side slopes are conducted using sensor probes with long handles.

Special leak lo impoundments

Sensitive leak location equipment consisting of a detector probe and indicator unit are used for pre-service inspection of landfill and impoundment liners.

...n surveys are used for deep impoundments or ... moderately hazardous liquids.

Electrical Leak Location Method

The electrical leak location technique takes advantage of the electrical insulating properties of the geomembrane material and the conductivity of the impounded liquid and the ground beneath the liner. The system includes an electrode placed in the liquid, another electrode in the ground outside the impoundment, an electric power supply connected to the electrodes, and a leak locater probe consisting of a rod with two measurement electrodes connected to a sensitive voltage detector unit. The probe detects the small voltage potential caused by electric current flowing through a leak. The detector signal level increases as the probe is moved toward a leak, enabling precise location of leaks as small as pinholes in acres of liner material.

Geomembrane Failure Mode Testing

SwRI also developed hydrostatic failure mode testing methods for polymer and polymer composite materials under simulated field subgrade conditions. A dedicated laboratory and a one-acre geomembrane-lined surface test impoundment on the Institute grounds are used to evaluate new geomembrane testing technologies. The SwRI Geomembrane Test Facility is equipped with 36 pressure test vessels for testing geomembrane specimens to 20 inches in diameter. The vessels are used to test geomembranes subjected to combinations of environmental conditions that include:

- Hydrostatic loading to 35 feet of head
- High, low, and/or fluctuating temperature
- Exposure to hazardous, toxic, and radioactive materials
- Subgrades that approximate field applications
- Seam and material stressing from tension or load points
- Transient and impact loading

Other Capabilities

The Institute is also experienced in environmental investigations, including:

- Advanced geophysical surveys
- Chemical sampling and analysis (EPA Contract Laboratory Program and Corps of Engineers MRD Certification)
- Hazardous material evaluations, including explosives and ordnance
- Environmental and regulatory assessments
- Remediation planning, investigation, and recommendations

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 10, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-359

Mr. Phillip L. Baca, P. E.
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Brine Storage Ponds

Dear Mr. Baca:

The Oil Conservation Division (OCD) has received your request, dated August 6, 1990, for an extension of time to close or repair the above referenced ponds beyond the currently approved date of September 30, 1990.

Based on the information provided in your request, an extension to operate the ponds until March 31, 1991, is approved. Operation of the ponds will be pursuant to your letter of October 13, 1989 and condition one (1) of the October 31, 1989 OCD letter.

If you have any questions, please call me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office

El Paso Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

August 6, 1990

David G. Boyer, Hydrogeologist
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87504

Subject: Request for Extension of Time to Close or Repair Two Brine Storage Ponds at EPNG's Jal No. 4 Plant.

Dear Mr. Boyer:

In your letter to EPNG dated May 25, 1990, concerning the closure of the subject ponds, you indicate that EPNG may request a limited extension of the pond closure timetable if EPNG is in the negotiation process with a potential buyer. EPNG is currently negotiating the sale of the subject facilities with Meridian Oil. Pending an outcome of a feasibility study being conducted by Meridian, a decision with respect to the sale will be made.

Given the current status of the two ponds, it is EPNG's belief that there is no threat to the groundwater from the ponds as long as the water level in the north pond is kept below a prescribed level, and any water that accumulates in the south pond is pumped out. Thus, EPNG is requesting OCD approval to leave the two ponds in their current status for six months until a final decision is made by Meridian. If the ponds are not sold, they will be closed at the end of this time period. If you have any questions concerning the ponds at Jal No. 4, please feel free to contact me at 915/541-5399.

Very Truly Yours,

Donald R. Payne

Donald R. Payne, P.E.
Manager, Compliance Engineering

DRP:dac

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 25, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-315

Mr. Donald R. Payne, Manager
South Region
Compliance Engineering
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Closure of Brine Storage Ponds at Jal #4

Dear Mr. Payne:

During our meeting of May 17th, you mentioned that EPNG wished to delay taking action regarding the Jal #4 brine storage ponds. It is still the position of OCD that the ponds should be either repaired or closed by the agreed upon date of September 30, 1990. However, if EPNG is in the process of negotiations with a potential buyer(s) regarding the sale of the facility, OCD will consider a request for limited extension of the closure timetable. If such request is made by EPNG and approved by OCD, the ponds shall continue to be operated as previously specified in earlier correspondence to prevent fluid accumulation. OCD Hobbs District inspectors confirm that current operation of the ponds meets these requirements.

If you have any further questions please contact me at (505) 827-5812.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: OCD Hobbs Office

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 4, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-149

Mr. Philip Baca
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

RE: Brine Pits
Jal #4 Gas Plant

Dear Mr. Baca:

The Oil Conservation Division (OCD) has received your proposal, dated March 21, 1990, for the closure of the two brine pits located at the Jal #4 Gas Plant.

The proposed method of closure will provide protection from contamination of ground water and is hereby approved. Notify this office when closure is completed.

If you have any questions, please contact met at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: Hobbs District Office

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

March 21, 1990

Mr. Roger Anderson
Environmental Bureau
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87504

Re: Closure of Brine Pits at EPNG's Jal #4 Plant.

Dear Mr. Anderson:

Per EPNG's letter dated 1/12/90, EPNG submits the following proposal for the closure of the two brine pits located at EPNG's Jal #4 Plant:

1. The south brine pit contains no liquid brine; however, a salt layer approximately one foot thick remains at the bottom of the pit. EPNG proposes to fold the membrane liner covering the sides of the pit over the salt layer. The pit will then be covered with a thick layer of caliche soil and mounded to provide for positive drainage from the pit location.

2. The north brine pit still contains a significant volume of brine solution. EPNG proposes to dispose of any brine solution from this pond in an approved manner (e.g., injection well), fold the membrane liner covering the sides of pit over to cover any residual solids at the bottom of the pit, cover the pit with a thick caliche layer, and mound the site to provide for positive drainage from the pit location.

3. Both sites will be fenced and clearly marked as being closed pits to prevent any accidental excavation on the site of the pits.

Should any deviation from the above procedure occurs, OCD will be promptly notified prior to implementation of an alternate procedure. In addition, EPNG welcomes the opportunity to discuss any concerns OCD may have with the above procedure.

If you have any questions concerning this matter, please feel free to contact me at 915/541-2323.

Sincerely,

Philip L. Baca, P.E.
Sr. Compliance Engr.

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

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

January 22, 1990

CERTIFIED MAIL
RETURN RECEIPT NO. P-918-402-158

Mr. Philip L. Baca
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Brine Ponds

Dear Mr. Baca:

The Oil Conservation Division (OCD) has received your proposal, dated January 12, 1990, for closure of the above referenced ponds on September 30, 1990.

Based on the information provided in your request, the proposal is approved. Further, an extension to operate the ponds until September 30, 1990 is approved. Operation of the ponds will be pursuant to the conditions contained in the October 31, 1989 OCD letter.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

January 12, 1990

David G. Boyer, Hydrogeologist
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87504

Re: EPNG's Jal #4 Plant Brine Ponds.

Dear Mr. Boyer:

Per OCD's letter dated 10/31/89, requiring EPNG to submit a solution for the repair or closure of the subject ponds, EPNG submits the following proposal:

1. The south brine pond will be scheduled for closure in July, 1990.
2. The north brine pond will be scheduled for closure in September, 1990.
3. A closure plan for both ponds will be submitted to OCD for review by April 2, 1990.
4. OCD will be notified promptly should any deviation from the above proposal occur.

Because the ponds are scheduled for closure beyond the expiration date approving the current mode of operation for the subject ponds, EPNG requests approval for an extension of time to operate the ponds until September 30, 1990, at which time the ponds will be closed. The extension of time will be subject to the conditions contained in OCD's letter dated 10/31/89.

If you have any questions concerning this matter, please feel free to contact me at 915/541-2323.

Sincerely,

Philip L. Baca, P.E.
Sr. Compliance Engineer

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

October 31, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-185

Mr. Donald R. Payne
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Brine Ponds

Dear Mr. Payne:

The Oil Conservation Division (OCD) has received your request, dated October 13, 1989 proposing to maintain the two lined brine ponds located at the above referenced gas plant in their current status.

Based on the information provided in your request, and the fact that the facility is currently for sale and not operating, your proposal is approved with the following conditions.

1. All fluids will be pumped out of the south pond and sumps immediately after each precipitation event.

2. The approval will expire on March 1, 1990. A permanent solution for the repair or closure of the ponds will be submitted to the OCD by January 15, 1990.

If you have any questions or comments , please call me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

October 13, 1989

David G. Boyer, Hydrogeologist
Environmental Bureau Chief
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87504

Dear Mr. Boyer:

In response to your letter dated August 18, 1989, El Paso Natural Gas Company (EPNG) submits the following information and proposal with respect to EPNG's Jal No. 4 Plant:

1. The south brine pond and associated monitor wells have been dewatered. The dewatering in the pond was accomplished by natural evaporation. The water observed in the monitor wells was pumped out and transported to the north brine pond until the wells were dry. The pond is now completely dry with only occasional water accumulation occurring as a result of rainfall. Thus, a thick layer of dry salt is generally all that is contained within the pond. When water does accumulate in the pond and monitor well as a result of rainfall, the water is pumped out and transported to the north brine pond.

2. The north brine pond is being kept at a water level below that point which apparently leaks.

3. Daily logs are maintained for both ponds and their respective monitor wells. A copy of the daily log for the month of September is attached for your review. The log reveals that the north pond monitor well shows no sign of water accumulation. Inspection of the log also indicates the dates where water has been pumped out of the monitor wells for the south brine pond.

As you are aware, the facility is currently for sale and the need for the ponds by the expected purchaser will be known by late 1989 or early 1990. The south pond is not expected to be needed, therefore it is anticipated that this pond will be closed. If the north pond is required by the expected purchaser, it is anticipated that the leak in this pond will be repaired.

Given the current status of the two ponds, it is EPNG's belief that there is no threat to the groundwater from the ponds as long as the water level in the north pond is kept below a prescribed level, and any water that accumulates in the south pond is pumped out. Thus, EPNG is proposing to leave the two ponds in their current status until the the need for the ponds is determined by the expected purchaser. EPNG is therefore requesting approval to maintain the two ponds in their current status. If you have any questions concerning the ponds at Jal No. 4, please feel free to contact me at 915/541-5399.

Very truly yours,

Donald R. Payne

Donald R. Payne, P.E.
Manager, Compliance Engineering

DRP:PLB:mts
Attachment

JAL 4 BRINE POND TEST WELL LOG

DATE	NORTH POND (INCHES) EAST WELL	NORTH POND (INCHES) WEST WELL	*	SOUTH POND (INCHES) EAST WELL	SOUTH POND (INCHES) WEST WELL	TESTER
8-29-89	0"	0"	*	9"	9"	Luera V.
8-30-89	0"	0"	*	1'1"	1'2½"	Ruben V.
8-31-89	0"	0"	*	1'4½"	1'5"	Ruben C.
9-1-89	0"	0"	*	2'0"	1'5"	White
9-2-89	0"	0"	*	0"	0"	A. Alvarado
9-3-89	0"	0"	*	7"	4"	Unite
9-4-89	0"	0	*	9"	5"	R. Carrillo
9-6-89	0"	0	*	11"	7"	R. Carrillo
9-7-89	0"	0	*	12"	8"	Alvarado
9-8-89	0"	0"	*	13"	10"	Hernandez
9-9-89	0"	0"	*	1'7"	12"	Hernandez
9-10-89	0	0	*	1'7"	1'1"	Hernandez
9-11-89	0	0	*	1'7"	1'1"	Alvarado
9-12-89	0	0	*	1'7"	1'1"	Alvarado
9-13-89	0	0	*	1'9"	1'2"	Alvarado
9-14-89	0	0	*	1'9"	1'3"	Hernandez
9-15	0		*	0	0	
		0	Pumped.	0 Pumped.	0	
9-17-89	0	0	*	0	0	
9-18-89	0	0	*	0	0	Hernandez
9-19-89	0	0	*	0	0	Hernandez
9-20-89	0	0	*	0	0	Hernandez
9-21-89	0	0	*	3"	3.5"	Henderson
9-22-89	0	0	*	7"	6"	Henderson
9-23-89	0	0	*	8"	6"	Henderson
9-24-89	0	0	*	10"	6"	Henderson
9-25-89	0	0	*	1'.5"	6-5"	Henderson
9-26-89	0	0	*	1'.5"	6-5"	Henderson
9-27-89	0	0	Pumped out	0	0	Henderson
9-28-89	0	0	*	0"	0	Ruben V.
9-29-89	0	0	*	0	0	R. Carrillo
9-30-89	0	0	*	2"	0	R. Carrillo
			*			
			*			
			*			
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			*			
			*			
			*			
			*			

CHECK WATER LEVELS IN WELLS ONCE EACH WEEK,
AFTER PUMPING WELLS EMPTY
KEEP LOG SHEET AT #3

Pump out all 6 tattle tales at #4. 9/15/89

9-1-89
pumped all 4 tattle tales full with Joe Dick from mens man.

8 F

Submit 4 Copies
to Appropriate
District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-134
Aug. 1, 1989

Permit No. H-19
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule711(I)

Operator Name: El Paso Natural Gas Company

Operator Address: P. O. Box 1492, El Paso, Texas 79978

Lease or Facility Name Jal No. 4 Field Plant Location

Ut. Ltr.	Sec.	Twp.	Rge
	32	23S	37E

Size of pit or tank: 334' x 235'

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

__X__ The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

The pond receives only brine. No oil-bearing wastewater piping is connected to the pond.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

N/A - No oil-bearing wastewater piping is connected to the pond.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

RECEIVED
AUG 31 1989
OIL CONSERVATION DIV.
SANTA FE

_____ Operator proposes the following alternate protective measures:

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature Philip L Baca Title Compliance Engineer Date 8/18/89

Printed Name Philip L. Baca, P.E. Telephone No. 915/541-2323

FOR OIL CONSERVATION DIVISION USE

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Date Facility Inspected

Approved by

Inspected by

Title

Date AUG 30 1989

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

August 18, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106-675-110

Mr. Donald R. Payne, P.E., Manager
SOUTH REGION COMPLIANCE ENGINEERING
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: EL PASO NATURAL GAS
JAL #4 GAS PLANT BRINE PONDS

Dear Mr. Payne:

During our meeting of August 15, 1989, you mentioned that you were unsure of the status of the two brine ponds at the Jal #4 plant. Yesterday morning during our phone conversation you stated that after pumping, the sumps in the north pond remained dry while south pond sumps continued to receive fluids. We are concerned because of the continued presence of fluids in the sumps, and because EPNG previously had committed to determine and correct the problem (February 7, 1989 letter from Dr. Henry Van, EPNG, to Roger Anderson, OCD). Therefore, OCD is requiring EPNG to take the following corrective action steps:

1. Immediately lower the level of remnant brine fluids in the south ponds so that fluids are no longer detected in the sumps.

2. Commence weekly inspections of all leak detection sumps. A record shall be kept of the date of inspection, inspector, and the result of inspection.

3. If fluids are found, remanent brine fluid levels must be lowered so that the fluids are below the level of the leak.

4. Within 60-days of receipt of this letter present to OCD for approval a plan and completion schedule to:

   a. Locate and repair leaks in the ponds; or

   b. Remove all remnant brine fluid, sludge and salt deposits; or

   c. Close the ponds including removal of the liner, and disposal of the liner, residual salt and sludges.

If the ponds are to be put back in surface for brine storage and injection into the gas storage wells, those wells should be tested for mechanical integrity prior to use. Check with the Hobbs OCD office for current testing procedures and requirements prior to returning them to operation.

IF you have any questions, please contact me at (505) 827-5812.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

cc: OCD Hobbs Office
Dr. Henry Van, EPNG

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

March 19, 1989

CERTIFIED MAIL
RETURN RECEIPT NO. P-106 675 485

Mr. John C. Bridges, Manager
Environmental Engineering
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal No. 4 Gas Plant
Lea County, New Mexico

Dear Mr. Bridges:

The ground water discharge plan renewal (GW-7) for the El Paso Natural Gas Company Jal #4 Gas Plant located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico is hereby approved. The original discharge plan was approved on December 29, 1982 and renewed on December 4, 1987. The renewal application consists of the original discharge plan as approved December 29, 1982 the renewal dated December 4, 1987, the application dated January 25, 1989 and supplemental information dated February 7, 1989.

The discharge plan was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is renewed pursuant to Section 3-109.F., which provides for the possible future amendments of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground water which may be actionable under other laws and/or regulations.

There will be no routine monitoring or reporting requirements other than those listed in the plan.

Please be advised that all exposed pits, including lined pits and open top tanks, shall be screened, netted, or otherwise rendered nonhazardous to wildlife to include migrating birds.

Please note that Section 3-104 of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3-107.C., you are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3-109.G.4. of the Regulations, this plan approval is for a period of two (2) years. This approval will expire December 29, 1990 and you should submit an application for renewal in ample time before that date. The two (2) year renewal will allow El Paso Natural Gas Company to resolve the status of the Jal #4 plant and decide if any modifications are to be implemented before resuming operation.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
Director

WJL/RCA/sl

cc: OCD Hobbs Office

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

March 7, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Mr. John C. Peterson
Field Supervisor
U.S. Fish and Wildlife Service
Suite D
3530 Pan American Highway, N.E.
Albuquerque, New Mexico 87107

Dear Mr. Peterson:

Thank you for your letter of March 1, 1989 providing comments in response to our public notice on pending ground water discharge plans. As you know, OCD has appointed an industry committee to study these issues and make recommendations for OCD rule and policy changes.

In the meantime, OCD will take the following actions regarding the information provided in your letter:

1. Notification of the companies listed in the public notice of the contents of your letter, and pending OCD rulemaking.

2. Modification of discharge plan guidelines for natural gas plants and other facilities to state that discharges to exposed surface facilities must not contain oily films, or that the facilities implement effective methods for prevention of bird contact with the water surface.

Upon completion of the rulemaking action, all companies having discharge plans will be notified of the necessity to protect migratory birds, and facilities will be monitored for compliance during the next regularly scheduled inspection.

If you have any questions regarding this matter, please contact David Boyer of my staff at (505) 827-5812.

Sincerely,

William J. LeMay
Director

WJL/DGB/sl

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

March 1, 1989

Mr. William J. Lemay, Director
Oil Conservation Division
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. ~~Lemay~~ Bill:

This responds to the public notice dated February 24, 1989, in which several proposed groundwater discharge plans were described. We have reviewed all of the plans and have identified resource issues of concern to our agency in the following:

GW-47 Sunterra Gas Processing Company, Lybrook Gas Plant. John Renner, General Manager, P.O. Box 1869, Bloom Field, NM 87143.

GW-7 El Paso Natural Gas Co., Jal #4 Gas Processing Plant, John C. Bridges Manager, Environmental Engineering Group, P.O. Box 1492 El Paso, Texas 79978.

GW-48 Davis Gas Processing Company, Donald K. Judd, Agent., 211 N. Colorado, Midland, Texas 79971.

Our concern is that any surface water discharges resulting from these operations should not have visible traces of oil or gas. If migratory birds were to come in contact with the contaminated waters and perish, violations of the Migratory Bird Treaty Act would have occurred. The Migratory Bird Treaty Act prohibits the taking, except by permit, of individual migratory birds (16 U.S.C. 703). The Migratory Bird Treaty Act prohibits unpermitted taking "by any means or in any manner" of the protected species. Case law has found that unintentional kills of migratory birds, by poisoning or other circumstances is prohibited. Fines of up to $10,000 have been levied against violators.

These comments represent the views of the Fish and Wildlife Service. If you have any questions concerning our comments, please contact Tom O'Brien or Richard Roy at (505) 883-7877 or FTS 474-7877.

Sincerely yours,

John C. Peterson
Field Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Regional Administrator, Environmental Protection Agency, Attn: Kathy Hollar, Office of Ground Water, Dallas, Texas
Regional Director, U.S. Fish and Wildlife Service, Fish and Wildlife Enhancement and Law Enforcement, Albuquerque, New Mexico

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I George W. Moore

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of

One weeks.
Beginning with the issue dated

February 19, 1989
and ending with the issue dated

February 19, 1989

George W. Moore
Publisher.

Sworn and subscribed to before me this 21 day of February, 1989

Vicki Murphy
Notary Public.

My Commission expires

November 14, 1992
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
February 19, 1989
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plans have been submitted for renewal or approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-7) El Paso Natural Gas Company, Jal #4 Gas Processing Plant, John C. Bridges, Manager, Environmental Engineering Group, P.O. Box 1492, El Paso, Texas 79978, has submitted an application for renewal of its previously approved discharge plan for its Jal #4 Gas Plant located in Section 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico. The plant is not in operation at this time and start up is not anticipated in the foreseeable future. If the plant were to begin operation, approximately 98,000 gallons per day of process waste water would be disposed on in an OCD-approved injection well located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/l. Groundwater most likely to be affected by an discharge at the surface is at a depth of approximately 105 feet with a total dissolved solids content of approximately 750 mg/l.

(GW-47) Sunterra Gas Processing Company, Lybrook Gas Plant, John Renner, General Manager, P.O. Box 1869, Bloomfield, New Mexico 87413, has submitted for approval a groundwater discharge plan application for its Lybrook Gas Plant located in the NW/4, NW/4, Section 14, Township 23 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. Approximately 3200 gallons per day of process wastewater is proposed to be disposed of into existing unlined ponds located on the eastern boundary of the plant property. The total dissolved solids concentration of the wastewater is approximately 8500 milligrams per liter (mg/l). Groundwater most likely to be affected by any discharge at the surface is at a depth in excess to 200 feet with a total dissolved solids concentration of 700 mg/l. The discharge plan addresses management of the ponds, including monitoring and how spills, leaks and other discharges to the ground will be handled.

(GW-48) Davis Gas Processing Company, Donald K. Judd, Agent, 211 N. Colorado, Midland, Texas 79971, has submitted for approval a groundwater discharge plan application for its Denton Gas Plant located in the SE/4, Section 2, Township 15 South, Range 37 East, NMPM, Lea County, New Mexico. Approximately 750 gallons per day of process wastewater will be collected and stored on site in storage tanks prior to disposal in an OCD-approved contract injection well. The total dissolved solids concentration of the wastewater is approximately 2000 milligrams per liter (mg/l). Groundwater most likely to be affected by any discharge at the surface is at a depth of approximately 40 feet with total dissolved solids concentration from 610 to 1600 mg/l. The discharge plan addresses how spills, leaks and other discharges to the ground 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. 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. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 9th day of February. To be published on or before February 24, 1989.

STATE OF
NEW MEXICO
OIL CONSERVATION
DIVISION
WILLIAM J. LEMAY,
Director
(Seal)

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

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(GW-7) El Paso Natural Gas Company, Jal #4 Gas Processing Plant, John C. Bridges, Manager Environmental Engineering Group, P.O. Box 4492, El Paso, Texas 79978, has sumbitted an application for renewal of its previously approved discharge plan for its Jal #4 Gas Plant located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East, (NMPM), Lea County, New Mexico. The plant is not in operation at this time and start up is not anticipated in the foreseeable future. If the plant were to begin operation, approximately 68,000 gallons per day of process waste water would be disposed of in an OCD-approved injection well located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/l. Groundwater most likely to be affected by an discharge at the surface is at a depth of approximately 105 feet with a total dissolved solids content of approximately 750 mg/l.

(GW-47) Sunterra Gas Processing Company, Lybrook Gas Plant, John Renner, General Manager, P.O. Box 1959, Bloomfield, New Mexico 87413, has submitted for approval a groundwater discharge plan application for its Lybrook Gas Plant located in the NW/4 NW/4 Section 14, Township 23 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. Approximately 3200 gallons per day of process wastewater is proposed to be disposed of into existing unlined ponds located on the eastern boundary of the plant property. The total dissolved solids concentration of the wastewater is approximately 8500 milligrams per liter (mg/l). Groundwater, most likely to be affected by any discharge at the surface is at a depth in excess of 200 feet with a total dissolved solids concentration of 700 mg/l. The discharge plan addresses management of the ponds, including monitoring, and how spills, leaks and other discharges to the ground will be handled.

(GW-48) Davis Gas Processing Company, Donald K. Judd, Agent, 211 N. Colorado, Midland, Texas 79971, has submitted for approval a groundwater discharge plan application for its Denton Gas Plant located in the SE/4, Section 2, Township 16 South, Range 37 East, NMPM, Lea County, New Mexico. Approximately 750 gallons per day of process wastewater will be collected and stored on site in storage tanks prior to disposal in an OCD-approved contract injection well. The total dissolved solids concentration of the wastewater is approximately 2000 milligrams per liter (mg/l). Groundwater most likely to be affected by any discharge at the surface is at a depth of approximately 40 feet with total dissolved solids concentration from 610 to 1600 mg/l. The discharge plan addresses how spills, leaks, and other discharges to the ground 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. 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. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

STATE OF NEW MEXICO } ss
County of Bernalillo

THOMAS J. SMITHSON ..... being duly sworn declares and says that he is ....NAT'L ADV. MGR.... of the **Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition,

for ....1.... times, the first publication being on the ...22... day of ....Feb.... ,198.9..., and the subsequent consecutive publications on ..... ,198.....

.....L Thomas J Smithson.....

OFFICIAL SEAL
Signature: Angela M Archibeque
ANGELA M. ARCHIBEQUE
NOTARY PUBLIC NEW MEXICO
Filed with Secretary of State
My Commission Expires 10/30/92

Sworn and subscribed to before me, a Notary Public in and for the County of Bernalillo and State of New Mexico, this ..22.. day of ....Feb.... ,198.9

PRICE $ 37.80

Statement to come at end of month.

ACCOUNT NUMBER C8D932

EDJ-15 (R-2/86)

RECEIVED
FEB 23 1989
OIL CONSERVATION DIVISION
SANTA FE

AFFIDAVIT OF PUBLICATION

No. 23012

STATE OF NEW MEXICO,
County of San Juan:

Betty Shipp being duly sworn, says: That he is the Nat'l. Adv. Manager of THE FARMINGTON DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached legal notice

was published in a regular and entire issue of the said FARMINGTON DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for one consecutive (days) (weeks) on the same day as follows:

First Publication Thursday, February 16, 1989

Second Publication

Third Publication

Fourth Publication

and that payment therefor in the amount of $ 45.47 has been made.

Betty Shipp

Subscribed and sworn to before me this 16th day of February, 1989.

NOTARY PUBLIC, SAN JUAN COUNTY, NEW MEXICO

My Commission expires: June 23, 1990

Copy of Publication

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plans have been submitted for renewal or approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088. Telephone (505)827-5800:

(GW-7) El Paso Natural Gas Company, Jal #4 Gas Processing Plant, John C. Bridges, Manager, Environmental Engineering Group, P.O. Box 1492, El Paso, Texas 79978, has submitted an application for renewal of its previously approved discharge plan for its Jal #4 Gas Plant located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico. The plant is not in operation at this time and start up is not anticipated in the foreseeable future. If the plant were to begin operation, approximately 98,000 gallons per day of process waste water would be disposed on in an OCD-approved injection well located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/l. Grownd water most likely to be affected by an discharge at the surface is at a depth of approximately 105 feet with a total dissolved solids content of approximately 750 mg/l.

(GW-47) Sunterra Gas Processing Company, Lybrook Gas Plant, John Renner, General Manager, P.O. Box 1869, Bloomfield, New Mexico 87413, has submitted for approval a groundwater discharge plan application for its Lybrook Gas Plant located in the NW/4, NW/4, Section 14, Township 23 North, Range 7 West, NMPM, Rio Arriba County, New Mexico. Approximately 3200 gallons per day of process wastewater is proposed to be disposed of into existing unlined ponds located on the eastern boundary of the plant property. The total dissolved solids concentration of the wastewater is approximately 8500 milligrams per liter (mg/1). Groundwater most likely to be affected by any discharge at the surface is at a depth in excess of 200 feet with a total dissolved solids concentration of 700 mg/1. The discharge plan addresses management of the ponds, including monitoring, and how spills, leaks and other dischages to the ground will be handled.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 9th day of February. To be published on or before February 24, 1989.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY, Director

SEAL

Legal No. 23012 published in the Farmington Daily Times, Farmington, New Mexico on Thursday, February 16, 1989.

43.20 *

43.20
2.27 *
45.47

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plans have been submitted for renewal or approval to the Director of the Oil Conservation Division, State Land Office Building, P. O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 9th day of February. To be published on or before February 24, 1989.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

S E A L

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

February 14, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-106 675 478

Mr. John C. Bridges, Manager
Environmental Engineering
EL PASO NATURAL GAS COMPANY
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal No. 4 Gas Plant
Lea County, New Mexico

Dear Mr. Bridges:

The Oil Conservation Division (OCD) has received the above referenced discharge plan renewal application. The application, dated January 25, 1989, was received by the OCD on January 26, 1989. Supplementary information dated February 7, 1987 pertaining to investigation of the possible leakage of the lined brine ponds was received on February 13, 1989.

Public notice of the application will be published on or before February 24, 1989. Following publication a period of thirty days is allowed for public comment during which a hearing can be requested. A hearing will be held if the Director determines there is significant public interest. If there are no comments or requests for a hearing during the thirty day period, the plan is approvable based on the information provided.

If you have any questions, please call me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Hobbs Office

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

February 7, 1989

Roger Anderson
New Mexico Oil Conservation Division
Land Office Building
P. O. Box 2088
Santa Fe, NM 87501

Reference: El Paso Natural Gas
Jal No. 4 Gas Treating Plant/Brine Ponds

Dear Mr. Anderson:

This is to notify you of the progress made regarding the salt water found in the brine ponds wet wells at Jal No. 4 Plant.

Mr. Larry Meyer, Compliance Engineer for the South Region, informed me that the water found in the wet wells has been pumped out. On February 7, 1988, these wet wells will be inspected to determine if there is any salt water. If salt water is found then a contractor will be hired to find the leak in the ponds and correct the problem. We will keep you adviced of the findings. However, we want to assure you that we are proceeding to determine the problem.

If you have questions, please contact me at 915/541-2832.

Very truly yours,

Henry Van, Ph.D., C.E.P.
Senior Environmental Engineer
Environmental & Safety Affairs Department

HV:gb

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: 915-541-2600

January 25, 1989

Mr. David G. Boyer, Chief
Environmental Bureau
Energy, Minerals and Natural Resource
New Mexico Oil Conservation Division
310 Old Santa Fe Trail, 206
Santa Fe, NM 87504

Reference: **Discharge Plan GW-7**
Jal No. 4 Natural Gas Processing Plant

Dear Mr. Boyer:

As we have been discussing over the last several months, El Paso continues to pursue the sale of the Jal No. 4 Plant. During the entire year of 1988, the plant was not operated and hence no discharges occurred.

Because the approval for Discharge Plan GW-7 expired on December 29, 1988, El Paso is hereby requesting a renewal of the discharge plan. This request is conditioned on the fact that the plant has not been operated and will not be operated in the foreseeable future until the sale of the facility is resolved. Moreover, when the time does come to review the discharge plan, this request for extension is tied to the commitment to pursue renewal and review according to NMOCD guidelines prior to start-up. This commitment is possible because there may well be certain changes in the discharge plan information when the plant is restarted, which will, in any case, require prior review with the NMOCD.

Your assistance in this matter is appreciated.

Sincerely,

John C. Bridges

John C. Bridges
Manager, Environmental Engineering
Environmental and Safety Affairs Department

JCB:cds

cc: Lewis E. Knight, Texaco

EPNG Jal # 4 Jack Hill
Jame Mildkiff

(1) Berm Oil, Ambitrol & brine storage area

(2) Old cooling tower needs pad liners for drift protection.

(3) Caustic tanks @ "B" Gasoline Frac. plant needs berms.

(4) DEA Mix, caustic at cooling tower area

(5) Oil & Kerosene at LPG Terminal

(6) Brine pond leaking to leak detection system Empty or replace / Fresh H_2O

Notes of Boyd
11/29/88
DFB

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 18, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. John C. Bridges, Manager
Environmental Engineering
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Lea County, N.M.

Dear Mr. Bridges:

On December 4, 1987, the ground water discharge plan, GW-7, for the Jal #4 Gas Plant located in Lea County was renewed by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission Regulations and it was approved for a period of one year. The approval will expire on December 29, 1988.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intend to make, any changes in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines will be used in review of your renewal application.

If you no longer have such discharges and discharge plan renewal is not needed, please notify this office.

If you have any questions, please do not hesitate to contact Roger Anderson or me at (505) 827-5812.

Sincerely,

David G. Boyer, Chief
Environmental Bureau

DGB:RA:sl

cc: OCD - Hobbs

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Dates corrected 3/3/88 - copy sent To EPNG RCA

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 4, 1987

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. John C. Bridges, Manager
Environmental Engineering
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Lea County, New Mexico

Dear Mr. Bridges:

The ground water discharge plan renewal (GW-7) for the El Paso Natural Gas Company Jal #4 Gas Plant located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico, is hereby approved. The original discharge plan was approved on December 29, 1987. The renewal application consists of the original discharge plan as approved December 29, 1987 and the application dated October 16, 1987.

The discharge plan was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations. It is renewed pursuant to Section 3-109.F., which provides for the possible future amendments of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground water which may be actionable under other laws and/or regulations.

There will be no routine monitoring or reporting requirements other than those listed in the plan.

Please note that Section 3-104 of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3-107.C., you are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3-109.G.4. of the Regulations, this plan approval is for a period of one (1) year. This approval will expire December 29, 1988 and you should submit an application for renewal in ample time before that date. The one (1) year renewal will allow El Paso Natural Gas Company to resolve the status of the Jal #4 plant and decide if any modifications are to be implemented.

On behalf of the staff of the Oil Conservation Division, I wish to thank you for your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
Director

WJL:RA:sl

cc: OCD - Hobbs

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Ecological Services
Suite D, 3530 Pan American Highway NE
Albuquerque, New Mexico 87107

November 9, 1987

Mr. William J. Lemay, Director
State of New Mexico Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Dear Mr. Lemay:

This letter concerns the Notice of Publication of discharge plans for El Paso Natural Gas Company. El Paso Natural Gas Company has submitted an application (GW-7) for renewal of its previously approved discharge plan for its Jal #4 Gas Plant located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico.

We have reviewed the discharge permit and find that there are no issues of concern to resources under our jurisdiction. Therefore, we have no objection to the discharge plans.

Thank you for the opportunity to comment on the discharge plans. If you have any additional questions, please contact Tom O'Brien at (505) 883-7877.

Sincerely,

John C. Peterson
Field Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Health and Environment Department, Environmental Improvement Division, Santa Fe, New Mexico
Regional Director, U.S. Fish and Wildlife Service, Fish and Wildlife Enhancement, Albuquerque, New Mexico

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I,_____

Mark C. Keeling

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of_____

One weeks.
Beginning with the issue dated

November 5, 1987
and ending with the issue dated

November 5, 1987

Mark C Keeling
Business Manager
Sworn and subscribed to before

me this 9 day of

November, 1987

Vera Murphy
Notary Public.

My Commission expires_____

Nov. 14, 1988
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal has been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-7) El Paso Natural Gas Company, Jal #4 Gas Processing Plant, John C. Bridges, Manager, Environmental Engineering Group, P.O. Box 1492, El Paso Texas 79978, has submitted an application for renewal of its previously approved discharge plan for its Jal #4 Gas Plan located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 98,000 gallons per day of process waste water will be disposed of in an OCD-approved injection well located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/l. Groundwater most likely to be affected by any discharge at the surface is at a depth of approximately 105 feet with a total dissolved solids content of approximately 750 mg/l.

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. 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 a public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

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

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GIVEN under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 29th day of October, 1987. To be published on or before November 13, 1987.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
s/William J. Lemay, Director

Journal, November 5, 1987.

STATE OF NEW MEXICO }
County of Bernalillo } SS

THOMAS J. SMITHSON

..... being duly sworn declares and says that he is NAT'L ADV. MGR. of the **Albuquerque Journal**, and that this **newspaper is duly qualified** to publish legal notices or advertisements within the meaning of **Section 3, Chapter 167**, Session Laws of 1937, and that payment therefore has been made or **assessed as court costs**; that the notice, a copy of which is hereto attached, was published in **said paper in the regular** daily edition,

for ..... 1 ..... times, the first publication being on the ..... 5 ..... day of ..... November ..... ,198.... 7 ....., and the subsequent consecutive publications on ..... ,198.....

..... Gene Lucas .....

OFFICIAL SEAL
Signature: Kathy Taylor
KATHY TAYLOR
NOTARY PUBLIC - NEW MEXICO
SAND FILED WITH SECRETARY OF STATE
Date: 1-23-90

Sworn and subscribed to before me, a Notary Public in and for the County of Bernalillo and State of New Mexico, this 5 day of November ,198.... 7

PRICE ..... $ 21.56 .....

Statement to come at end of month.

ACCOUNT NUMBER ..... C 80293 .....

EDJ-15 (R-2/86)

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

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

GIVEN under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 29th day of October, 1987. To be published on or before November 13, 1987.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL

WILLIAM J. LEMAY, Director

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan renewal has been submitted for approval to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-7) El Paso Natural Gas Company, Jal #4 Gas Processing Plant, John C. Bridges, Manager, Environmental Engineering Group, P.O. Box 1492, El Paso Texas 79978, has submitted an application for renewal of its previously approved discharge plan for its Jal #4 Gas Plan located in Sections 31 and 32, Township 23 South and Sections 5 and 6, Township 24 South, Range 37 East (NMPM), Lea County, New Mexico. Approximately 98,000 gallons per day of process waste water will be disposed of in an OCD-approved injection well located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/l. Groundwater most likely to be affected by any discharge at the surface is at a depth of approximately 105 feet with a total dissolved solids content of approximately 750 mg/l.

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

GIVEN under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 29th day of October, 1987. To be published on or before November 13, 1987.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL

WILLIAM J. LEMAY, Director

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 2:00 PM	Date 12/27/87

Originating Party	Other Parties
John Bridges Manager, EPNG	David Boyer

Subject Discharge Plan GW-7 Renewal/Modification

Discussion John called and we discussed their letter of October 16, 1987. Since status of Jal-4 has not been resolved, OCD will do a file review of the plan and issue a one-year renewal unless severe deficiencies are found. Schedule: ① Week of Nov 2/87 issue public notice ② Grant up to 60-day extension to allow public notice and file review. ③ Renewal plan for maximum of one-year ④ EPNG decides if modifications are to be made to Jal 4.

Conclusions or Agreements ⑤ OCD issues letter requesting renewal and inspects facility. ⑥ At end of 1 year, will have 5 year renewal or modified DP.

Distribution EPNG Jal 4

Signed David J Boyer

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

August 10, 1987

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. John C. Bridges, Manager
Environmental Engineering
El Paso Natural Gas Company
P.O. Box 1492
El Paso, Texas 79978

RE: Discharge Plan GW-7
Jal #4 Gas Plant
Lea County, N.M.

Dear Mr. Bridges:

On ~~November~~ December 29, 1982, the ground water discharge plan, GW-7, for the Jal #4 Gas Plant location in Lea County was approved by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission Regulations and it was approved for a period of five years or less. The approval will expire on November 11, 1987.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. the OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intend to make, any charges in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines will be used in review of your renewal application.

If you no longer have such discharges and discharge plan renewal is not need, please notify this office.

If you have any questions, please do not hesitate to contact Roger Anderson or me at (505) 827-5812.

Sincerely,

David G. Boyer
Hydrogeologist/Environmental Bureau Chief

Enc.

cc: W.J. LeMay
OCD-Hobbs

El Paso
Natural Gas Company

October 16, 1987

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Mr. David Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501-2088

Re: Discharge Plan GW-7
Jal #4 Gas Plant
Lea County, New Mexico

Dear Mr. Boyer;

On August 17, 1987 El Paso received notice that the referenced Plan approval will expire on November 11, 1987. Since that time we have discussed the status of the Jal #4 facility with you and pursuant to your recommendations, this letter will serve as our application for renewal of the Plan. As we discussed, certain changes in the discharge system may be made, however, the certainty and magnitude of these changes are not known. In any case, there will be no changes to the existing effluent handling and disposal systems prior to the November 11, 1987 expiration date for the current approval.

When and if any changes are identified which will modify any information found in the current Discharge Plan (GS-7), El Paso will immediately notify the Oil Conservation Division.

As always, your assistance is appreciated.

Very truly yours,

John C. Bridges

John C. Bridges
Manager
Environmental Engineering Group
Environmental and Safety Affairs

ka

CERTIFIED/RETURN RECEIPT REQUESTED

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

May 5, 1986

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Reference: Underground Storage Tank Notifications

Dear Sirs:

Enclosed please find copies of completed underground storage tank (UST) notifications for those tanks located at El Paso Natural Gas (El Paso) locations in New Mexico. Only those forms containing information on tanks related to activities associated with the exploration, development, or production of oil, gas or geothermal resources are included.

As you are well aware, one of the categories of tanks which are not required to be registered and are excluded according to specific statutory language are those at pipeline facilities (including gathring lines) regulated under the Natural Gas Pipeline Safety Act of 1968.

On the advice of El Paso's Legal Counsel, notification forms have been completed for all tanks which might otherwise be subject to the notification requirements and have been sent to the appropriate office of the Department of Transportation (DOT). DOT regulates all facilities which are used in the transportation of gas. All the above mentioned tanks meet the definition of equipment used in the transportation of gas. As a courtesy, copies of the completed forms being sent to DOT are enclosed.

Please note that each form includes the following disclaimer:

> "The tank for which this registration is made is excluded from the registration requirement because it is a pipeline facility regulated under the Natural Gas Pipeline Safety Act of 1968. El Paso Natural Gas Company is providing this form to DOT as a courtesy with copies to the appropriate state agency."

Should you need further information please contact Howard Reiquam, Director of Environmental Affairs Department or myself at (915)541-3292 or 541-2869, respectively.

Very truly yours,

P.E. Dearhart for JCB

John C. Bridges
Manager, Environmental Engineering
Environmental Affairs Department

JCB:gb

Notification for Underground Storage Tanks

FORM APPROVED
OMB NO. 2050-0068
APPROVAL EXPIRES 8-30-88

FOR TANKS IN NM

RETURN COMPLETED FORM TO

New Mexico Environmental Improvement Division
Ground Water/Hazardous Waste Bureau
P.O. Box 968 (505) 827-2933
Santa Fe, NM 87504 (505) 827-2918

STATE USE ONLY

I D Number

Date Received

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means:

(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances; and

(b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: **1.** gasoline, used oil, or diesel fuel; and **2.** industrial solvents, pesticides, herbicides or fumigants.

What Tanks Are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws;
5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where To Notify? Completed notification forms should be sent to the address given at the top of this page.

When To Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. **2.** Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use.

Penalties: Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed $10,000 for each tank for which notification is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. **This form must by completed for each location containing underground storage tanks.** If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

Indicate number of continuation sheets attached: 1 *

I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
El Paso Natural Gas Company

Street Address
P. O. Box 1492

County
El Paso

City: El Paso | State: Texas | ZIP Code: 79978

Area Code: 915 | Phone Number: 541-2879

Type of Owner (*Mark all that apply* ☒)

- ☐ Current
- ☐ Former
- ☐ State or Local Gov't
- ☐ Federal Gov't (GSA facility I.D. no. _____)
- ☒ Private or Corporate
- ☐ Ownership uncertain

II. LOCATION OF TANK(S)

(If same as Section 1, mark box here ☐)

Facility Name or Company Site Identifier, as applicable
Jal #4

Street Address or State Road, as applicable
P.O. Box 1384

County
Lea

City (nearest): Jal | State: NM | ZIP Code: 88252

Indicate number of tanks at this location: 5

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands ☐

III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here ☒) | Job Title | Area Code | Phone Number

IV. TYPE OF NOTIFICATION

☐ Mark box here only if this is an amended or subsequent notification for this location.

V. CERTIFICATION (Read and sign after completing Section VI.)

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

Name and official title of owner or owner's authorized representative	Signature	Date Signed
John C. Bridges	John C. Bridges	5/3/86

CONTINUE ON REVERSE SIDE

* See page 3 of 3.

VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3...)		Tank No. 5004-1 *	Tank No. 5004-2 *	Tank No. 5004-3 *	Tank No. 5004-4 *	Tank No. 5004-5 *
. Status of Tank (Mark all that apply ☒)	Currently in Use	X	X	X	X	X
	Temporarily Out of Use					
	Permanently Out of Use					
	Brought into Use after 5/8/86					
. Estimated Age (Years)		4	10	5	3	5
. Estimated Total Capacity (Gallons)			66	235	530	338394
. Material of Construction (Mark one ☒)	Steel		X		X	X
	Concrete					
	Fiberglass Reinforced Plastic			X		
	Unknown					
	Other, Please Specify					
. Internal Protection (Mark all that apply ☒)	Cathodic Protection					
	Interior Lining (e.g., epoxy resins)				X	X
	None		X	X	X	X
	Unknown					
	Other, Please Specify				paint	paint
. External Protection (Mark all that apply ☒)	Cathodic Protection		X		X	X
	Painted (e.g., asphaltic)				X	X
	Fiberglass Reinforced Plastic Coated					
	None			X		
	Unknown					
	Other, Please Specify				paint	paint
. Piping (Mark all that apply ☒)	Bare Steel					
	Galvanized Steel					
	Fiberglass Reinforced Plastic					
	Cathodically Protected					X
	Unknown					
	Other, Please Specify					coated steel
. Substance Currently or Last Stored in Greatest Quantity by Volume (Mark all that apply ☒)	**a. Empty**					
	b. Petroleum					
	Diesel					
	Kerosene					
	Gasoline (including alcohol blends)					
	Used Oil	X	X		X	
	Other, Please Specify			Oil & Water		Oil & Water
	c. Hazardous Substance					
	Please Indicate Name of Principal CERCLA Substance					
	OR Chemical Abstract Service (CAS) No.					
	Mark box ☒ if tank stores a mixture of substances					
	d. Unknown					
. Additional Information (for tanks permanently taken out of service)	**a.** Estimated date last used (mo/yr)	/	/	/	/	/
	b. Estimated quantity of substance remaining (gal.)					
	c. Mark box ☒ if tank was filled with inert material (e.g., sand, concrete)					

* See page 3 of 3.

Jal #4

*Disclaimer

The tank for which this registration is made is excluded from the registration requirement because it is a pipeline facility regulated under the Natural Gas Pipeline Safety Act of 1968. El Paso Natural Gas Company is providing this form to DOT as a courtesy with copies to the appropriate state agency.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

March 4, 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

El Paso Natural Gas Co.
One Petroleum Center/Building Two
3300 North "A" Street
Midland, Texas 79707

Attention: Mr. J. W. Cunningham

Re: EPNG Discharge Plans -
Lea County Plants Drain
Line Testing

Dear Mr. Cunningham:

We have reviewed the results of the drain line testing program which was conducted by EPNG as part of the discharge plan for the Jal No. 3 (GWR-10), Jal No. 4 (GWR-7), Eunice (GWR-9), and Monument (GWR-8) gas processing plants.

Upon analysis of the results and an estimation of the corrosion rates, we concur with your suggestion that yearly testing of the drain systems would be excessive. Therefore, by this letter, hydrostatic testing of the underground drain systems for the Jal No. 3, Jal No. 4, Eunice, and Monument gas processing plants will be required as part of the discharge plan renewal process. The testing program for each plant should be completed prior to the submittal of the discharge plan renewal. The discharge plan renewal shall include drawings of, and procedures for, the testing program as well as the results obtained from the testing program. A list of all piping replaced should also be included.

It should be noted that in the future, all gas processing plants and oil refineries in excess of twenty-five years of age will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan approval or renewal.

If you have any questions concerning this letter and the effect it may have on other EPNG plants, please feel free to call Phil Baca or Dave Boyer at (505) 827-5812.

Sincerely,

R. L. STAMETS
Director

RLS/PB/dp

cc: William F. Lorang, EPNG
OCD-Hobbs Office

P 505 905 861

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

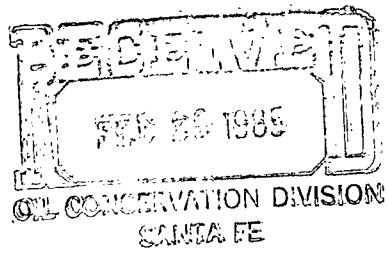
Sent to El Paso Natural Gas	
Street and No. 3300 N. "A" St.	
P.O. State and ZIP Code Midland, Texas 79707	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

PS Form 3800, Feb. 1982

El Paso
Natural Gas Company

ONE PETROLEUM CENTER / BUILDING TWO
3300 NORTH "A" STREET
MIDLAND, TEXAS 79705

February 25, 1985



Mr. Philip L. Baca
Environmental Engineer
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Baca:

Per our telephone conversation of this date, enclosed are copies of our Jal No. 3 and Jal No. 4 Plant drain system drawings. I have placed a check mark by the lines that were replaced or repaired.

Items b, c, d and e, as noted in O. R. Dakan's memorandum to J. W. Cunningham dated February 15, 1985, for Jal No. 3 Plant were installed in 1950. Items a and f were installed in 1959.

Items a and b for Jal No. 4 Plant were installed in 1952.

Hopefully, this information, along with the information supplied to you last week, will enable OCD to relax the annual drain line testing requirements of our Discharge Plans and also enable you to develope testing intervals that are realistic and can be justified by companies in our industry.

If additional information is needed, please let me know.

Sincerely,

EL PASO NATURAL GAS COMPANY

J. W. Cunningham, Coordinator
Technical Operations Department

JWC:gfc

Enclosures

Plant Age: 34 yrs

Pipe Size	Sch. 40 Wall Thick.	Sch. 10 Wall Thick	Assumed C-Rate	Sch. 40 C-Rate	Sch. 10 C-Rate
3"	.216"	.120"	.02"/yr	.006"/yr	.003"/yr
4"	.237"	.120"		.007"/yr	.003"/yr
6"	.280"	.130"		.008"/yr	.004"/yr
8"	.322"	.148"		.009"/yr	.004"/yr
10"	.365	.165"		.011"/yr	.005"/yr
				$\bar{x}$ = .008"/yr	$\bar{x}$ = .004"/yr

Assume Corrosion Rate of .02 in/yr

Pipe Size	Sch. 40 Wall Thick	Sch. 10 Wall Thick	Life Sch. 40	Life Sch. 10
3"	.216"	.120"	11 yr	6 yr
4"	.237"	.120"	12 yr	6 yr
6"	.280"	.130"	14 yr	7 yr
8"	.322"	.148"	16 yr	7.4 yr
10"	.365"	.165"	18 yr	8.3 yr
			$\bar{x}$ = 14.2 yr	$\bar{x}$ = 6.9 yr

Assume Corrosion Rate of .01 in/yr

Pipe Size	Life Sch. 40	Life Sch. 10
3"	22 yr	12 yr
4"	24 yr	12 yr
6"	28 yr	14 yr
8"	32 yr	15 yr
10"	36 yr	16 yr
	$\bar{x}$ = 28.4 yr.	$\bar{x}$ = 13.8 yr.

∴ Choose a 25 yr. life for pipes. Start inspecting when plants reach 25 yrs.

Pipe Replaced By EPNG

Jal #4

180' of 4" Pipe	32 yrs. Old	
110' of 8" Pipe	32 yrs. Old	
75' of 10" Pipe	32 yrs. Old	

Jal #3

40' of 3" Pipe	25 yrs Old	(High Temp)
70' of 3" Pipe	32 yrs Old	
10' of 6" Pipe	32 yrs Old	
25' of 4" Pipe	32 yrs Old	
9' of 6" Pipe	32 yrs Old	

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
MIDLAND, TEXAS 79705
PHONE: 915-684-5701

February 19, 1985

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. R. L. Stamets, Director

RE: EPNG DISCHARGE PLANS - LEA COUNTY PLANTS
DRAIN LINE TESTING

Gentlemen:

This letter is to advise that El Paso Natural Gas Company has just recently completed the hydrostatic drain line testing of our Lea County Plants for the year 1984. This testing was done pursuant to our approved Discharge Plans for Eunice, Jal No. 3, Jal No. 4 and Monument. Drain lines in the Jal No. 1 Plant were not tested because the plant is currently shut down. There are no plans at the present time to reactivate the plant.

Attached for your information and to be considered as part of this report are two (2) memorandums from Mr. O. R. Dakan to J. W. Cunningham detailing the results of the tests, repairs or actions taken and cost information associated with the tests.

As you will note all lines not meeting the test requirements were either repaired, replaced, or taken out of service except for line No. TDL-15"-L1, which is a clay tile line running beneath the Jal No. 3 gasoline plant concrete drain aprons and a 4" low pressure drain line running beneath the concrete drain apron in the treating plant at Jal No. 3. It would be extremely expensive to repair or replace these lines.

Because of the extraordinary time and expense involved in annual testing of the drain lines and because of the remote possibility of ground water contamination from leaking drain lines, El Paso Natural Gas Company respectfully requests that the annual drain line testing provision of the Discharge Plans be rescinded or at least be extended to no more than once every five years. Also, as support for our request to rescind this provision is the fact that we have been advised by Phillips Petroleum Company and Northern Natural Gas Company, who also operate plants in the Lea County Area that they do not have these requirements in their approved Discharge Plans.

If there are any questions regarding the test results or our request to rescind the test requirements, please advise the undersigned at your earliest convenience.

Sincerely,

EL PASO NATURAL GAS COMPANY

J. W. Cunningham
Coordinator, Technical Operations

JWC:dc

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

February 25, 1985

Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Reference: Tracer Log - Shell State SWD #13-1,
Sec. 32, 23S, 37E
Jal No. 4 Plant SWD #214

Dear Sir:

Enclosed is a copy of the Tracer Log which was run on the above captioned well on February 17, 1985 as an annual requirement requested by your Division.

Should additional information be required, please advise.

Sincerely yours,

James B. Kelly
Senior Environmental Engineer
Environmental Affairs Department

mts
Enclosure

El Paso Natural Gas Company

MEMORANDUM

TO: J. W. Cunningham

DATE: February 15, 1985

FROM: O. R. Dakan

PLACE: Permian Division-Midland

RE: RESULTS OF DRAINLINE TESTING AT SOUTHEASTERN NEW MEXICO PLANTS

After checking available drawing information, it has been determined that the underground portion of the drain systems are as follows:

PLANT	LENGTH OF DRAIN LINES, ALL SIZES
Jal #4	33,045 ft.
Jal #3	26,115 ft.
Eunice	15,535 ft.
Monument	4,665 ft.

Currently, the status of the above drain systems is as follows:

I. Jal No. 4 Plant-Lines which would not hold test pressure were:

Installed 1952

a) 4" low pressure drain from reflux accumulator to 16" drain header (line has been rerouted and replaced).

b) 10"/8" boiler and evaporator blowdown header (line has been replaced).

II. Jal No. 3 Plant-Lines which would not hold test pressure were:

a) Line: ODL-6"-L3 Leaks in 3" drains from intercoolers were repaired. Line in service. (1959)

1950

b) Line: ODL-3"-L17 Opendrain from the reflux accumulator. This steel line (70') is being replaced with PVC line.

c) Line: 6" L.P. from hot wells to line ODL-8"-L10-10' section replaced and line retested.

d) Line: 4" L.P. drain from Solution exchangers to Line ODL-8"-L12 leaking under concrete apron. No repairs have been made.

e) Line: 6" L.P. drain to solution sump - 9' Section replaced and line retested.

1959

f) Line: TDL-15"-L1 Open Apron and storm water drain. This tile line would not pressure because of joint design (Mortar joints) and inability to get a tight seal with the expandable plugs. This drain handles liquids from the Aprons during bundle cleaning operations, steam condensate from the heat tracing line steam traps, and rain water. The discharge end of the line empties into an open distribution sump and has no pressure in the line during normal operations. Under these conditions any leakage at the joints will be minimal since the liquid will take the path of least resistance (i.e. the open end of the line). The line is located under all the concrete aprons North of the Gasoline Pump house and would be extremely expensive to replace. Considering the types of fluids that this

line transports and the cost of replacement, unless ordered otherwise, this line will be left as is.

At Eunice Plant, the lines which would not hold test pressures were:

a) Line: 6" from water treating building to 8" open drain header. A short section of this line has apparently been subjected to corrosion in a "Hot Spot" where cathodic protection was interrupted. This condition is to be corrected and the clamped section of line replaced. Fluid is water treater backwash water.

b) Line: 4" Drain from Mainline inlet scrubber area to 8" open drain header (Taps F43 and F28). This drain was found to be inactive and was permanently isolated at the 4" to 8" junction. Line is now inactive.

At Monument Plant, there were no leaks on the drain lines. All lines shown on Drainline drawing are in service.

Other than those lines, or sections, previously mentioned, all drain lines in these systems tested leak-free. Pressure charts are on file at the plant for verification of pressures and durations in accordance with the respective drain line test procedures previously published.

O. R. Dakan

ORD:cd

cc: L. E. Anderson
Harold Franklin
Bill Lorang
Charlie Mathis
G. T. Thurman
P. E. Wieland
File - 2

El Paso Natural Gas Company

MEMORANDUM

TO: J. W. CUNNINGHAM

DATE: FEBRUARY 7, 1985

FROM: O. R. DAKAN

PLACE: PERMIAN DIVISION-MIDLAND

RE: 1984 DRAINLINE TESTING COSTS

Listed below are the actual costs of Pressure Testing the drainlines at the southeastern New Mexico plants.

Monument			
	EPNG Labor	(402)	$2052.07
	EPNG Equipment	(420)	1333.37
	Material & Parts	(417)	530.19
	Contractor Charges	(429)	5279.00
		Total	$9194.63
Eunice			
	EPNG Labor	(402)	$3743.67
	EPNG Equipment	(420)	1610.25
	Materials & Supplies	(417)	1118.15
	Contractors Charges	(429)	6375.96
		Total	$12,848.03
Jal No. 3			
	EPNG Labor	(402)	$4646.74
	EPNG Equipment	(420)	1530.15
	Materials & Supplies	(417)	3948.18
	Contractor Charges	(429)	7414.60
		Total	$17,539.67
Jal No. 4			
	EPNG Labor	(402)	$10354.93
	EPNG Equipment	(420)	3741.80
	Materials & Supplies	(417)	6097.82
	Contractors Charges	(429)	6097.82
		Total	$26,292.37
	Total direct cost - 4 Plants -		$65,874.70

FM 10-0003

After discussions with Hardy Cook and personnel at the respective plants, it has been estimated that approximately $5000 additional EPNG labor and equipment charges were spent as indirect or unlabeled expenses. Plant personnel were involved in location of lines, valves and drains at various times during the testing procedure.

It is recommended that the Oil Conservation Division (OCD) be petitioned to extend the testing interval to 5 years instead of the present annual schedule. Although the next test will not be as expensive as this initial test, an annual outlay of approximately $40,000 to $50,000 for drain line testing is not warranted. Testing on a 5 year basis would serve the same purpose at a reduced average annual cost.

O. R. Dakan
Chief Division Project Engineer

ORD:jlr

cc: L. E. Anderson
Harold Franklin
Bill Lorang
Charlie Mathis
G. T. Thurman
P. E. Wieland
File - 2

SUBJECT: SALT WATER DISPOSAL WELL ORDER NO. SWD-214

THE APPLICATION OF EL PASO NATURAL GAS COMPANY FOR A SALT WATER DISPOSAL WELL.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701 (C), El Paso Natural Gas Company made application to the New Mexico Oil Conservation Division on September 27, 1979, for permission to complete for salt water disposal its Shell State No. 13 located in Unit L of Section 32, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

The Division Director finds:

(1) That application has been duly filed under the provisions of Rule 701 (C) of the Division Rules and Regulations;

(2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and

(3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.

(4) That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, El Paso Natural Gas Company, is hereby authorized to complete its Shell State No. 13 located in Unit L of Section 32, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Grayburg formation at approximately 3930 feet to approximately 3990 feet through 2 7/8 inch plastic lined tubing set in a packer located at least 500 feet below the top of the cement on the 4 1/2-inch casing string as determined by a cement bond log to be run on the well or a depth of 2750 feet, whichever is deeper.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the operator shall submit a copy of the cement bond log to both the Santa Fe and district office of the Division.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilate detection of leakage in the casing, tubing, or packer.

That the injection pressure shall not exceed 785 pounds per square inch as measured at the surface.

That the operator shall notify the supervisor of the Division's Hobbs District Office before injection is commenced through said well;

ORDER No. SWD-214

That the operator shall immediately notify the Supervisor of the Division Hobbs District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

PROVIDED FURTHER: That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 704 and 1120 of the Division's Rules and Regulation.

APPROVED at Santa Fe, New Mexico, on this 23rd day of October, 1979.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Division Director

SEAL

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: ~~915-543-2600~~ 915 543-5465

September 27, 1979

Mr. Dan Nutter
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

El Paso Natural Gas Company requests approval of the attached "Application To Dispose Of Salt Water By Injection Into A Porous Formation" Form C-108.

The subject well, El Paso Natural Gas Company, Shell-State No. 13, is a depleted producing well from the Yates and Queen formations. It is our intention to cement-squeeze both these zones and drill deeper to the Greyburg section for waste water injection. There are no production wells in the Greyburg formation within a two mile radius of this well to my knowledge. The field operator for this unit is Getty Oil Company and the signed waiver is enclosed.

If there is any additional information needed, please contact me.

Very truly yours,

James B. Kelly

James B. Kelly
Senior Engineer
Operations - Water Resources

JBK:rh
Attachments

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

July 5, 1983

Mr. Joe Ramey, Director
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's Lea County Plants
Pond Closure Status Report

Dear Mr. Ramey:

El Paso Natural Gas Company continued dewatering efforts at its Lea County Plants during the month of June. The status of the ponds as of July 1, 1983 is summarized below:

Jal No. 1 Plant

All ponds at this location are completely empty except for the lined pond, Pond No. 2, which is approximately 75% full. The water from this pond will be used for secondary recovery operations.

Jal No. 3 Plant

There has been no change in the status of ponds 1 and 2 at this location since last month's report. The steel tanks which replaced ponds 3 and 4 were placed into operation during the past month and both ponds were completely dewatered as of July 1.

Jal No. 4 Plant

The engine on the pump which was being used to pump the sewage effluent from Pond No. 1 into the wastewater system is still under repair. The fluid level in the pond was slightly lower than that reported last month, due primarily to evaporation.

Eunice Plant

Pond No. 5 had only a very slight amount of liquid on the bottom surface and should be completely dry within a few days.

All sections of Pond No. 4 are empty except for the northwest section, which appears to contain approximately 6" of liquid, and the northern section, which has a small amount of liquid remaining in the deepest part (east end).

Monument Plant

All ponds at this location are either completely dry or have been pumped to the lowest possible levels with conventional pumping methods.

All ponds at El Paso's Lea County Plants, except for Pond No. 1 at the Jal No. 4 Plant, have been dewatered to the greatest degree possible by pumping and are now in a "drying" stage. The only means to expedite further drying would be to mix sand with the remaining oily sludge in some ponds and spread the mixture in a thin layer over the bottom surface of the ponds. We would propose, with the NMOCD's approval, to proceed with this effort.

If you should require further information concerning the subject of this report, please notify me.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Assistant Division Superintendent

cm

Distribution:

Messrs. B. J. Matthews
R. F. Cook
H. E. Reiquam
D. J. Mobbs
J. W. Cunningham
J. F. Eichelmann, Jr.
file

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

June 1, 1983

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. R. L. Stamets

Gentlemen:

During our meeting of May 5, 1983 you requested a brief description of the Jal No. 4 Plant LPG storage operation and brine pond construction. Attached, in response to your request, are the following items:

1) Description of the storage facilities operation

2) Drawing No. JJ4-L-90 - Jal No. 4 Storage Facilities Flow Diagram

3) Drawing No. 1J4-1-M35 - North Brine Pond Plan and Profile

4) Drawing No. 1J4-1-M36 - North Brine Pond Leak Detection Plan, Section and Details

5) Drawing No. 1J4-1-M37 - North Brine Pond Section and Details

6) Drawing No. 1J4-1-M10 - South Brine Pond Plan and Profile

7) Drawing No. 1J4-1-M33 - South Brine Pond Leak Detection Plan, Section and Details

8) Drawing No. 1J4-1-M34 - South Brine Pond Section and Details

If you should require additional information or have any questions relative to this system, please call.

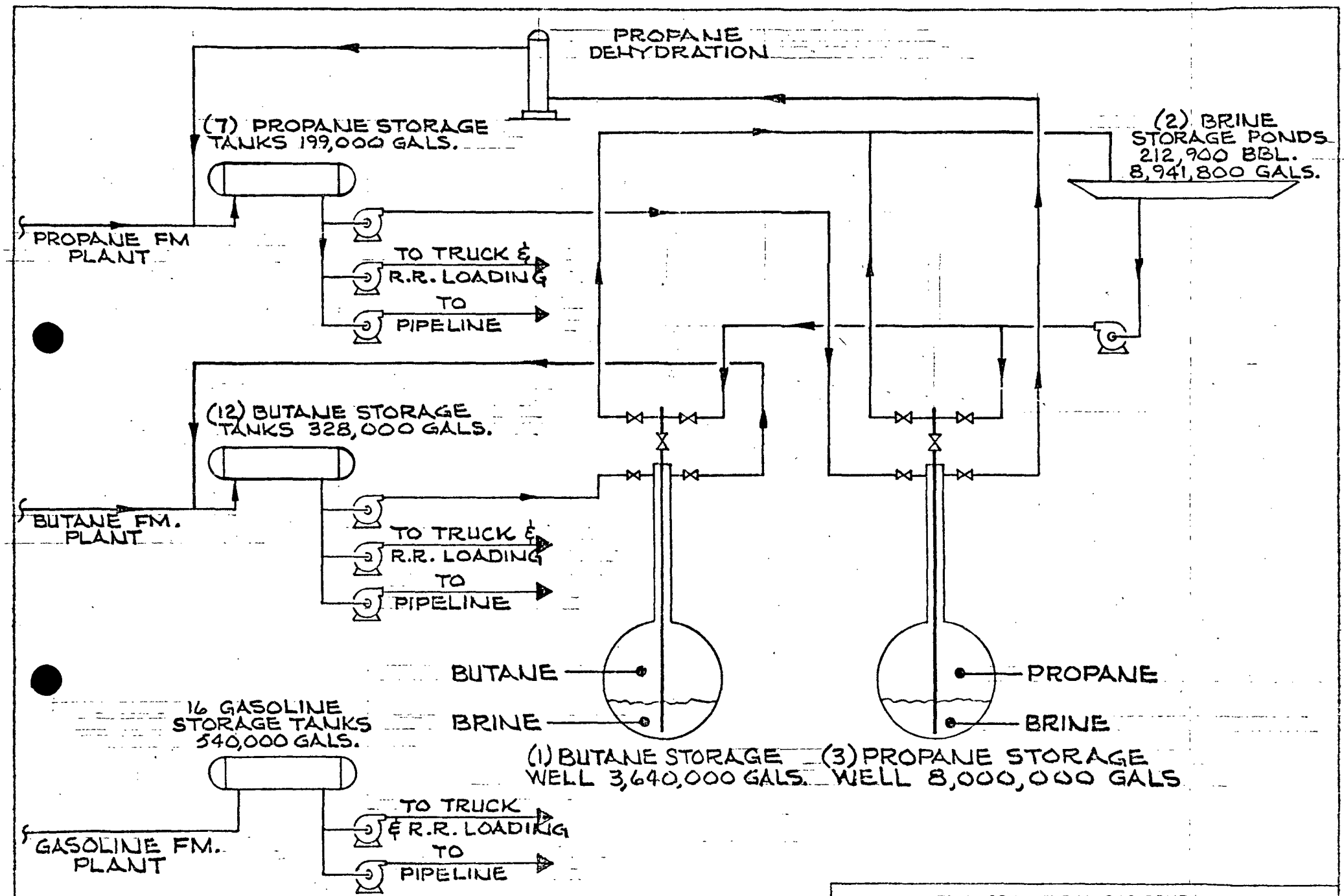
Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie dc

D. N. Bigbie
Ass't Division Superintendent

DNB:dc



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

JAL #4 STORAGE FACILITIES
FLOW DIAGRAM

SCALE NONE.	DATE 5-23-83	No. JJ4-L-90
DRAWN BY [illegible]	CHECKED BY	

FORM 7-133R (10-56)

STORAGE FACILITIES OPERATION

Propane, Butane and Gasoline is piped from the fractionation and treating plant into above ground horizontal storage vessels. From these vessels the three products can be pumped into products pipelines, trucks or rail cars. Butane and Propane can also be pumped into underground storage wells. When Butane or Propane is pumped into the underground storage wells it displaces brine which is forced to the surface and stored in two lined brine storage ponds. When it is necessary to bring Butane or Propane out of underground storage, brine is pumped into the appropriate well, which forces the product out of the well, and back into the above ground horizontal storage tanks.

Attached is a piping diagram of the storage facilities and drawings showing details and specifications of both brine storage ponds.

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

May 31, 1983

Mr. Joe Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Plants
Pond Closure Status Report

Dear Mr. Ramey:

The status of the subject wastewater ponds as of May 26, 1983 is as follows:

Jal No. 1 Plant

a) Ponds Numbers 1 and 3 are dry (free of any visible liquid). Pond Number 2, the lined pond, contains approximately 3 to 4 feet of liquid which will be used for secondary recovery operations.

b) Pond Number 9 is dry, and the liquid level in Pond Number 8 is down approximately 6 feet from the previous level.

c) As reported last month, Ponds Numbers 4, 5 and 7 are dry.

Jal No. 2 Plant

a) As reported last month, the Jal 2 site ponds were closed under the verbal authorization given by Mr. Simpson at the April 7, 1983 meeting. This plant will be deleted from future reports.

Jal No. 3 Plant

a) Sandy loam soil has been mixed with the heavy sludge in Pond Number 2 and the mixture will be spread over the bottom of the pond to expedite drying. The same procedure will be followed for Pond Number 1, although no sand had been added as of May 26th.

Jal No. 3 Plant - Cont'd

b) Steel tanks have been installed and partially backfilled at the Ponds Numbers 3 and 4 locations. Remaining work and tie-ins to the wastewater drain system will be completed by June 15, 1983, at which time the water in these two ponds will be pumped into the steel tanks and use of the ponds will be discontinued.

c) As reported last month, Ponds Numbers 5 and 6 were closed under the verbal authorization given by Mr. Simpson at the April 7, 1983 meeting. Reference to these ponds will be deleted from future reports.

Jal No. 4 Plant

a) The engine on the pump which was being used to pump the sewage effluent from Pond Number 1 into the wastewater system burned up and is presently being overhauled. The level of the effluent in the pond is approximately 1 to 2 feet below the level when we visited the site with EPA and EID personnel on May 3, 1983.

b) All other ponds at this site are dry and awaiting closure. In accordance with your verbal instructions of May 3, 1983, no further work will be done on closure of any ponds until written authorization is received from the NMOCD. We would request that requirements for closure be defined as soon as possible, however, so the "depression" type ponds (Numbers 4, 5, 6 and 7) at Jal No. 4 can be closed to prevent additional collection of water during the forthcoming summer rainy season.

Eunice Plant

a) The level of liquid (sewage effluent) in Pond Number 5 is down approximately 5 feet from previous levels and is evaporating rapidly.

b) Dewatering efforts have been underway at Pond Number 4 during May and only the 3 west-end containment sections and the northeast containment section have fluid remaining in them. The levels in the west-end containments are approximately 2 feet below last month's levels and appear to be near the bottom of the ponds.

c) All other ponds at this location are empty.

Monument Plant

a) Pumping was in progress on May 26 on Pond Number 1. The east side of the pond was almost empty at the time.

b) Ponds Numbers 2, 3 and 4 had been pumped to the lowest possible levels and each had only a small amount of liquid in the bottom.

c) Ponds Numbers 5 and 6 appear completely dry.

If you should have any questions concerning any of the information in this report, please call.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie
Assistant Division Superintendent

DNB:dc

CC: B. J. Matthews
R. F. Cook
H. Reiquam
J. W. Cronenberg
D. J. Mobbs

El Paso NATURAL GAS COMPANY

P. O. BOX 1384
JAL, NEW MEXICO 88252

PHONE: 505-395-2551

April 7, 1983

Oscar A. Simpson, III
P. O. Box 2088
State Land Office Building
Santa Fe, NM 87501

Attached are three (3) copies of the site grading plan at our Jal No. 4 Plant. The contour lines shown are proposed finished grade lines. Existing grades are shown on Figure 5, Drawing No. 5004.19-1 (photomap), included in the Discharge Plan.

If you have any questions concerning this matter, please call me at 505-395-2551, Ext. 2216.

Sincerely,

O. R. Dakan

O. R. Dakan
Sr. Project Engineer

ORD:jls

cc: File - 2

JAL 4 + EUNICE & MONUMENT

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701
PHONE: 915-684-5701

February 28, 1983

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Waste Water Discharge Plans for
El Paso Natural Gas Company's
Eunice and Monument Plants

Dear Mr. Simpson:

During the cursory review of the referenced Discharge Plans at our February 8, 1983 meeting, you requested additional information relative to comments made in the plans. The requests, as I noted them, are restated with answers below:

1. Provide a detailed description of the test methods used to determine the chromate levels in the plant wastewater.

   The step-by-step test procedures outlined in Appendix II - EP Toxicity Test Procedure of the EPA Rules and Regulations, Part 261, Identification and Listing of Hazardous Waste, were followed to conduct the subject tests.

2. What were the ph values of the sludge samples at the beginning and completion of the tests?

   The ph values of the sludge samples were stabilized to 5.0 ± 0.2 at the beginning of the tests, in accordance with the test procedures. The ph values of all samples at the completion of the tests were always 5.0 ± 0.2 and the allotted amount of acid was never required to maintain the required ph.

3. Provide a complete description of the sludge sampling techniques including; sample size, preservation techniques, date obtained, location obtained and name of person who obtained sample.

Sludge samples were obtained from each side of the cooling tower basins (4 samples per tower basin) by using a container mounted on a pole and dipping into the sludge. Samples ranging in size from two to five pounds were gathered and placed immediately into sealed glass containers for transportation to the laboratory, where 100 gram samples were extracted for testing purposes. The names of individuals who collected samples and the dates samples were collected are on file in the Permian Division laboratory, but were not included here due to the numerous dates involved.

4. Provide complete information relative to the certification of El Paso Natural Gas Company's Permian Division Laboratory.

   Dr. Ramirez of the EID Testing Laboratories in Albuquerque, New Mexico is scheduled to visit the Permian Division laboratory on Tuesday, March 1, 1983 for purposes of providing State of New Mexico certification of the laboratory for conducting inorganic analyses.

5. Provide a complete description of wastewater sampling and analysis procedures at Monument Plant, including; sampling frequency, plant processes in operation during the sampling period and analysis techniques (one analysis of composite sample or statistical average of individual samples?).

   The samples were obtained on approximately an hourly basis beginning at 9:45 AM on December 7, 1982, with the last sample obtained at 8:45 AM on December 8, 1982. Each sample was analyzed and the statistical average of these results was presented in the discharge plan. However, individual analysis results indicate concentration levels ranging from less than 0.1 mg/1 to a maximum of 3.3 mg/1 of chromium. Results of the analyses are summarized on the attached EPNG Company memorandum dated December 10, 1982, from Greg Kardos to Mike Keating.

Plant processes as described on pages 25 and 26 of the Discharge Plan were in operation during the 24 hour testing period. Additionally, the closed cooling system filters were backwashed during the period, resulting in the increased levels of chromium during the early afternoon and evening hours of December 7. These levels should present the "worst case" condition with respect to high chromium levels at this facility.

In addition to the above, you requested a copy of the strip chart recording of the injection flow rates and pressures, plus a complete description of the mechanical equipment and the fluid used for the Jal No. 4 disposal well step-rate test.

Davis Services, Inc. personnel were contacted by telephone February 9, 1983 and requested to prepare a package containing the requested information for submittal to you on February 11, 1983. I have not received a copy of the transmittal, but I trust that this information was presented to you as requested.

I believe the above information satisfies all outstanding requests for additional information relative to the referenced discharge plans. We respectfully request expeditious completion and submittal of your final comments for these plans to enable us to finalize the plans for advertising.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Assistant Division Superintendent

DNB:dc

El Paso NATURAL GAS COMPANY

Memorandum

FEB 15 1983

TO: Mike Keating

DATE: December 10, 1982

FROM: Greg Kardos

PLACE: Permian Division Lab

RE: CHROMIUM ANALYSIS ON MONUMENT WASTE WATER TO RICE ENGINEERING.

The following are the results obtained from the samples secured 12/7/82-12/8/82 on an hourly basis. The chromium content was obtained by direct aspiration atomic absorption.

Date	Time	Results mg/l Cr
12-7	9:45am	<0.1
12-7	10:45	<0.1
12-7	11:45	0.1
12-7	12:45pm	1.8
12-7	1:45	2.6
12-7	2:45	3.3
12-7	3:45	2.0
12-7	4:45	1.7
12-7	6:15	1.1
12-7	7:45	2.2
12-7	8:45	1.6
12-7	9:45	1.6
12-7	10:45	1.6
12-7	11:45	1.0
12-8	12:45am	0.8
12-8	1:45	0.6
12-8	2:45	0.5
12-8	3:45	0.5
12-8	4:45	0.3
12-8	5:45	0.4
12-8	6:45	0.4
12-8	7:45	0.7
12-8	8:45	0.5
12-8	9:45	0.4

Gregory C Kardos

Gregory Kardos,
Chemist

cc: R. T. Wright
Larry Anderson
File

Form 10-3

El Paso NATURAL GAS COMPANY

P. O. BOX 1384
JAL, NEW MEXICO 88252
PHONE: 505-395-2551

January 31, 1983

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

ATTN: Oscar Simpson, III
Water Resource Specialist

RE: HANDLING METHODS FOR CLASSIFIER AND COOLING TOWER SLUDGES

Dear Mr. Simpson:

This letter is to confirm our telephone conversation of January 20, 1983 relating to the disposition of sludge from the wastewater classifiers and cooling tower basins. It is my understanding that these materials can be deposited in an on-site pit provided chemical analyses of sludge samples do not indicate unacceptable concentrations of toxic materials. As discussed, these analyses will be performed prior to removal of the sludges during normal cleaning operations to determine handling methods.

Unless notified otherwise, we will handle these classifier and cooling tower basin sludges as indicated above.

Also during our conversation you expressed concern about the residual chromium content of the cooling tower sludges because of previous water treatment. Attached is a copy of a memo indicating the chromium levels in sludge samples from cooling tower basins at various area plants. These samples were analyzed using the extraction procedure outlined in Appendix II of 40 CFR, part 261 (RCRA), and you will note that no chromium content exceeds the 5 milligram per liter requirement to be defined as a hazardous waste.

Sincerely,

O. R. Dakan

EL PASO NATURAL GAS COMPANY
O. R. Dakan
Senior Project Engineer

ORD:jls

Attachment

cc: J. W. Cronenberg
D. N. Bigbie
D. J. Mobbs
R. Hester
L. E. Anderson
File - 2

El Paso Natural Gas Company

MEMORANDUM

TO: Larry Anderson

DATE: January 3, 1983

FROM: Gregory Kardos

PLACE: Permian Division Lab - Jal

RE: CHROMIUM ANALYSES ON COOLING TOWER SLUDGE EXTRACTS FROM NEW MEXICO

Chromium Analyses were run by a Direct Aspiration Atomic Absorption on the following Cooling Tower Sludge Extracts which were digested with Nitric Acid. The results are as follows:

Cooling Tower Sludge Extract	mg/l Cr
Jal #1 Refrigeration	0.12
Jal #1 Gasoline	0.10
Jal #1 Treating Plant	Less than 0.10
Jal #1 Compressor	Less than 0.10
Jal #3 Gasoline	Less than 0.10
Jal #3 "A" Tower	Less than 0.10
Monument	0.21
Eunice #1 Field	0.12
Eunice #2 Field	0.38
Eunice #3 Field	0.12
Eunice Mainline	0.42
Eunice 1&2 Field	0.10
Eunice Treating Plant	0.49

Gregory C Kardos

Gregory C Kardos,
Chemist

GCK/sf
cc: R. T. Wright
File

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
525 Camino de los Marquez
Santa Fe, New Mexico
87501

BRUCE KING
GOVERNOR

December 29, 1982

El Paso Natural Gas Company
Two Petroleum Center / Suite 200
North "A" at Wadley
Midland, Texas 79701

ATTENTION: D. N. Bigbee

RE: GWR-7
Discharge Plan

Gentlemen:

The Discharge Plan with accompanying addendums and additional information submitted pursuant to the Water Quality Control Commission Regulations for the controlled discharge of waste water and associated fluids from Jal Plant No. 4 located in Sections 5, 6, 31 and 32, Townships 23 and 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby approved with the following stipulations:

1. El Paso will submit on April 4, 1983 a complete comprehensive closure plan for all waste water ponds and the associated sludge at Jal Plant No. 4. The proposed closure plan shall demonstrate that leachate from the ponds and sludges will not degragate ground water for present or future use.

2. El Paso will submit on April 4, 1983, their report entitled, "Evaluation of Organic Constituents in Sludges at the Jal No. 4 Plant Waste Disposal Ponds " to the Oil Conservation Division. Justification for the methodology to close present and past waste water disposal ponds containing sludges will be derived from this report. Phenols shall be included in the organic constituents to be evaluated.

3. El Paso will submit on April 4, 1983, a detailed leak testing system for all drain lines and open floor or apron drains at Jal Plant No. 4 in lieu of a monitoring system for ground water. The leak testing system will provide a detailed description of testing procedures for each type of drain line and illustrate graphically each segment of the various drain lines to be tested. El Paso will submit an engineering report which includes data and calculations to substantiate the validity of the leak testing methods to be used and supply specifications and detection limits for each test method.

The Oil Conservation Division will review the above additional information when submitted and upon acceptance of this material, will consider El Paso to have completed its requirements for a discharge plan at Jal Plant No. 4.

The discharge plan was submitted pursuant to Section 3-106 of the Water Quality Control Commission regulations. It is approved pursuant to Section 109. Please note subsections 3-109.E and 3-109.F which provide for possible future amendment of the plan. Please also be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

Yours very truly,

Joe D. Ramey
Division Director

JDR/OS/dp

cc: El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

ATTN: Environmental Affairs

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

December 28, 1982

El Paso Natural Gas Company
P.O. Box 1384
Jal, New Mexico 88252

ATTENTION: O. R. Dakan

RE: Brine Holding Ponds at
Jal Plant #4

Dear Sir:

To complete the permitting procedure by assigning a permit number for the two brine holding ponds at Jal Plant #4, the OCD requests complete sets of as built drawings for the two brine ponds.

In addition, please submit summary sheets of the final quantities of materials used in construction of the ponds. If you have any questions concerning this matter, please contact me at (505) 827-5822.

Sincerely,

Oscar Simpson, III
Water Resource Specialist

OS/dp

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

December 7, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects
Construction Status Report
November, 1982

Dear Mr. Simpson:

Construction progress on El Paso Natural Gas Company's referenced projects during the month of November, 1982 is summarized below:

JAL NO. 4 PLANT

Drain Line Test Procedures - The recording pressure gauges have been received and will be installed on the drain line pressure taps during the week of December 6, 1982. These pressures will provide data for completing the drain line test procedure.

Chemical Drums Storage Pads - The curbed pads, on which chemical drums and containers will be stored and chemicals transferred, have been completed and the drains will be tied into the drain system by mid-December.

Waste Water Disposal Well - A step rate injection test on this well was conducted on November 23, 1982. Results of this test will be discussed with you and Messrs. Ramey and Stametz during our meeting December 10, 1982.

JAL NO. 1 PLANT

The waste water system construction is proceeding on the latest reported schedule. Construction is still expected to be completed by December 15, 1982.

JAL NO. 3, EUNICE AND MONUMENT PLANTS

Construction has been completed and all waste water discharge systems are in operation.

If you should have any questions concerning the status of these projects, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Assistant Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

November 3, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects
Construction Status Report -
October, 1982

Dear Mr. Simpson:

Construction progress on El Paso Natural Gas Company's referenced waste water disposal projects during the month of October, 1982 is outlined below:

Jal No. 4 Plant

All waste water disposal systems are complete and in operation. Work Orders have been initiated for the caustic heat exchanger area concrete pad and curbing and the concrete pads and curbs for the chemical drum storage areas.

Jal No. 3 Plant

All work is complete except for the tie-in to the drain system of the flare condensate and the boiler condensate lines. Design work is underway to complete these tie-ins.

Jal No. 1 Plant

Work is progressing on all phases of the waste water disposal and drain line systems. Completion of all systems is currently projected by December 1, 1982.

Eunice Plant

The waste water disposal systems were completed and deliveries of waste water to Rice Engineering commenced October 22, 1982.

Monument Plant

The disposal systems were completed and waste water deliveries to Rice Engineering commenced October 26, 1982.

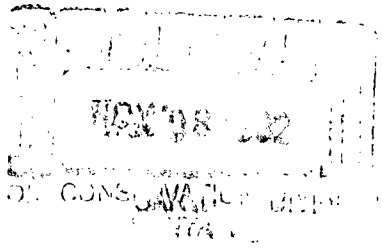
If you should have any questions concerning the status of any of these plant systems, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie
Assistant Division Superintendent

DNB:dc



NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO

Notice Date:
10/29/82 (ALB)
11/1/82 (HOBBS)
10/29/82 (ARTESIA)

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plan has been submitted for approval to the Director of the Oil Conservation Division, P. O. Box 2088, State Land Office Building, Santa Fe, New Mexico 87501, telephone (505) 827-3260.

EL PASO NATURAL GAS COMPANY, Jal Plant No. 4 (Sections 5, 6, 31, and 32, Townships 23 and 24 South, Range 37 East) P. O. Box 1384, Jal, New Mexico 88252, also P. O. Box 1492, El Paso, Texas 79978, telephone (915) 541-3292, proposes to discharge approximately 2330 barrels of waste water per day. The waste water is derived from plant process, boiler and cooling tower water, and domestic effluent. Approximately 430 barrels per day of cooling tower water will be supplied to Conoco Inc. for their use in a nearby waterflood project. The remainder of the waste water will be disposed of by an injection well(Section 32, Township 23 South, Range 37 East) located at the plant site. The total dissolved solids content of the waste water is approximately 1100 mg/L.

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. 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 a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 25th day of October, 1982.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

JOE D. RAMEY

Director

S E A L

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

October 1, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Jal No. 4 Plant Brine System
Construction Status Report
September, 1982

Dear Mr. Simpson:

The fiberglass brine surge tank and the new brine transfer pipeline were tied into the Jal No. 4 brine system during September.

All Jal No. 4 Plant brine system modifications are now complete.

If you should have any questions or require additional information, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

September

October 1, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects
Construction Status Report -
September, 1982

Dear Mr. Simpson:

Construction progress on El Paso Natural Gas Company's referenced projects during the month of September, 1982 is outlined below:

Jal No. 4 Plant

Sewage Pond No. 1 - Discharge of sewage effluent into this pond was discontinued in August when the sewage chlorination system was completed.

Drain Line Test Procedures - Work is still underway on the installation of taps on the "pressure" drain lines to ascertain normal operating pressures. Recording pressure gauges have been ordered for this purpose.

Classifier Pump Seals - Water flushed seals for the classifier pumps were received September 30, 1982 and will be installed during the first week in October. This type seal has been installed on the new brine pumps and, although operating experience has been limited, the application appears to be very successful for the service conditions imposed by the waste water system.

Jal No. 3 Plant

Contingency Tank - The steel contingency tank installation has been completed and the piping tie-ins should be completed on schedule, during the first week in October.

Re: Construction Status Report
September, 1982
Lea County Waste Water Project
El Paso Natural Gas Company

Jal No. 1 Plant

Waste Water Drain Line/Classifier System - Installation of the drain lines is continuing, but the start of construction on the classifier system has been delayed due to contract problems. A second contract is presently being executed and work should begin during the first week in October.

Contingency Tank - Excavation for the contingency tank has been completed and steel fabrication will commence during the first week in October.

Eunice Plant

Filter Automatic Back Wash System - Completion of this system has been delayed slightly, but instrumentation and electrical work should be completed and the system placed into operation during the first week in October.

Contingency Tank - Piping tie-ins are in progress and should be completed within one week. Deliveries of waste water to Rice Engineering should commence during the first week in October.

Monument Plant

Contingency Tank - Coating of the steel contingency tank is presently underway. Coating should be completed and all piping tied in by October 8, and waste water deliveries to Rice Engineering should commence during the second week in October.

It now appears that the waste water disposal systems at four of El Paso's Lea County Plants should be complete and in full service by the end of October, 1982. The Jal No. 1 Plant systems should be completed during November.

If you should have any questions concerning the progress or status of any of the projects, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

September 28, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects

Dear Mr. Simpson:

During discussions at our August 31, 1982 meeting you requested several items of information from El Paso Natural Gas Company. The following items are attached in response to your request:

1. Proposed Evaluation of Jal No. 4 Plant Waste Disposal Ponds for Organic Constituants

2. Proposed Drain Line Test Procedure
   This plan does not include at this time the detailed test instructions for use by plant personnel to actually test the lines or the test pressures for the various "pressure" lines identified on the drain line drawing. However, this plan will be prepared when necessary data are available and submitted to you at that time.

3. Drawing No. JJ4-1-P5 - Jal No. 4 Plant Underground Drain Lines - Piping Plan

4. Construction Specifications - Scope of Work - Jal No. 1 Plant.

Information specifically requested during our meeting, but not fully addressed in Item 4, was the method to be used to seal the concrete settling pit. El Paso plans to use high density concrete for the pit and does not presently plan to coat or seal the concrete with sealing material.

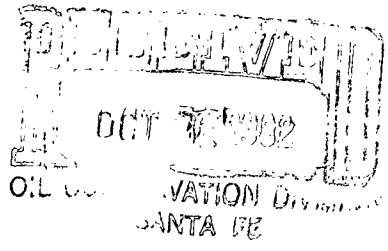
If you should have any questions or require additional information, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc
Attachments



El Paso NATURAL GAS COMPANY

Memorandum

TO: D. N. Bigbie

FROM: O. R. Dakan

DATE: September 10, 1982

PLACE: Permian Division
Engineering - Jal

RE: PROPOSED DRAIN LINE LEAKAGE TESTING (HYDROSTATIC)

The Test Method Will Be:

1. Isolate section of underground drain system by insertion of Williamson "Stoppel" type plug at each extremity of section to be tested.

2. Pressurize section by use of water to 10 pounds per square inch above maximum normal drain pressure as recorded on calibrated pressure instrument.

3. After pressure has stabilized, test pressure will be maintained against static system for a period of 1 hour.

4. If there is no drop in pressure, it will be assumed that the section is leak-free.

5. Pressure will be removed and plug(s) will be moved to fitting(s) of next section to be tested.

6. This procedure will be repeated for each section of drain line in the complex until the entire drain system has been tested.

7. If a section will not maintain the static test pressure for the required time, providing there is no valve or fitting leakage, this section of drain line will be exposed and the faulty portion(s) will be repaired or replaced, and test repeated.

8. When integrity of drain system has been proven, drains will be returned to normal service.

9. This procedure is to be repeated annually during the scheduled turn around (shutdown).

Test fittings for the foregoing procedure are to be T. D. Williamson "Shortstopp 60" type with Neoprene plugs for all lines 4-inch and larger. Line sizes under 4-inch will be isolated by ball valves with resilient seats and seals. Shortstopp fittings will be attached to the pipe by welding procedures which are in accordance with the Company's M.E.S., then

the opening into the drain line will be made by use of hot tap, or boring machine. Lines under 4-inch will be cut, threaded and screwed valves installed using standard piping procedures.

Open floor or apron drains will be sealed with expandable plugs similar to "Wedge-Lock" piping plugs as manufactured by T. D. Williamson, Inc.

O. R. Dakan
Sr. Project Engineer

ORD:jls

cc: M. E. McEuen
J. W. Cronenberg
D. J. Mobbs
Rex Hester
C. E. Goin
W. H. Tuttle
File - 2

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

August 27, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Jal No. 4 Plant Brine System
Construction Status Report -
August, 1982

Dear Mr. Simpson:

The north brine pond was completed and inspected on August 6, 1982.

The fiberglass brine surge tank is presently in position, but cannot be tied into the brine system until workover of the No. 3 storage well is completed. Work is presently underway on this well and should be completed during September, 1982.

The brine transfer pipeline is also still awaiting completion of the No. 3 well workover for tie-in to the system.

The fiberglass sumps have been installed and tied-in at both brine pump houses.

When the brine transfer pipeline and the brine surge tank are tied into the system, the Jal No. 4 brine system modifications will be complete.

If you should have any questions or require additional information relative to these projects, please advise.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

AUGUST

August 27, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects
Construction Status Report -
August, 1982

Dear Mr. Simpson:

Construction progress during the month of August, 1982 is outlined below:

Jal No. 4 Plant

Contingency Tank - The steel contingency tank was completed and placed into service during the first week in August.

Injection System - The automatic filter backwash system was checked out and the system is now fully operational in the automatic mode.

Sewage Chlorination System - The sewage chlorination system was completed and placed in service August 20, 1982. The sewage effluent in Pond No. 1 will be treated with granulated HTH, pumped into the classifier system and subsequently injected into the disposal well. Draining of Pond No. 1 will be accomplished as rapidly as possible without overloading the disposal system.

Drain Line Test Procedure - Taps have been installed on the "high pressure" drain lines to facilitate the installation of recorders to be used to ascertain normal operating pressures encountered on the system. This information will be used to define the test procedure pressures.

Injection System Sump - The fiberglass sump tank for the injection system pumps has been installed. The pump for this system will be installed during the first week in September.

Jal No. 3 Plant

Sewage Chlorination System - The sewage chlorination system was completed and placed into service early in August, 1982. A blind plate will be installed on the sewage effluent discharge line to the pond at the Jal No. 2 location to assure no further discharge into the pond.

Contingency Tank - Construction of the steel contingency tank commenced August 23, 1982. This installation should be complete and in service by the first week in October, 1982.

Jal No. 1 Plant

Waste Water Drain Line/Classifier System - Construction is proceeding on the drain line collection system. Construction of the classifier system is scheduled to commence during the week of September 6, 1982. Drawings for this system are attached to this report for your information.

Contingency Tank - Material for the steel contingency tank is on order and the tank will be constructed in conjunction with the classifier system construction.

Eunice Plant

Sewage Chlorination System - The sewage chlorination is complete and in service.

Filter Automatic Back-Wash System - The automatic controls for the filter automatic backwash system have been "proven" at Jal No. 4, and the automatic control system will be in service, allowing deliveries of waste water to the Rice Engineering System, by September 10, 1982.

Contingency Tank - Construction of the steel contingency tank commenced August 24, 1982. The installation should be complete by the first week of October, 1982.

Monument Plant

Contingency Tank - Construction of the steel contingency tank is scheduled to commence the week of September 1, 1982.

Sewage Chlorination System - This system was completed during August.

Classifier System - Construction of this system has been completed; however, the control system for the filter automatic backwash system must be checked-out and activated before deliveries to the Rice Engineering system can commence. This should be completed during September, 1982.

If you should have any questions concerning the progress or status of any of the projects, please call.

Sincerely yours,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

Form G-1 4/78

CONFIDENTIAL

MATERIAL SAFETY DATA SHEET

Section 1 – PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	EMERGENCY PHONE NO.
DEARBORN CHEMICAL (U.S.), CHEMED CORPORATION	312/438-8241

ADDRESS
300 Genesee St., Lake Zurich, IL 60047

CHEMICAL NAME AND SYNONYMS	TRADE NAME OR CODE IDENT.
Cooling water treatment	DEARBORN 517

Section 2 – INGREDIENTS

	CAS No.	%	EXPOSURE CRITERIA
Alkaline chromates and dichromates (expressed as Na_2CrO_4)		Approx. 72	TWA 0.05 mg/m^3

Section 3 – PHYSICAL DATA

BOILING POINT, 760mm Hg		MELTING POINT	
SPECIFIC GRAVITY (H_2O = 1) bulk density	10.0 lb/gal	VAPOR PRESSURE	
VAPOR DENSITY (AIR = 1)		SOLUBILITY IN H_2O, % BY WT.	appreciable
% VOLATILES BY VOLUME	None	EVAPORATION RATE, _____ = 1	
APPEARANCE AND ODOR	Orange-yellow powder	pH of 1% soln 7.5 (cold)	8.8 (boiled)

Section 4 – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (and Method Used)	FLAMMABLE LIMITS in AIR, % by VOLUME LOWER / UPPER	AUTO IGNITION TEMPERATURE
None		

EXTINGUISHING MEDIA ☐ Water Fog ☐ Foam ☐ CO_2 ☐ Dry Chemical ☐ Other

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

Section 5 – REACTIVITY DATA

STABILITY (Normal Conditions)	CONDITIONS TO AVOID
☒ Stable ☐ Unstable	

INCOMPATIBILITY (Materials to Avoid)
Reducing materials; sodium sulfite, ferrous sulfate, etc.

HAZARDOUS DECOMPOSITION PRODUCTS
Decomposes at 750°F. to give O_2 and O_2 and Cr_2O_3

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
☐ May Occur ☒ Will Not Occur	

(over)

Not established

EFFECTS OF OVEREXPOSURE

INHALATION: Will irritate and damage mucuous membrane, nasal passages and lungs. Do not breathe fumes or dust.

INGESTION: Harmful if swallowed. If ingested, induce vomiting. Give milk or egg whites and water copiously. Consult a physician. Oral toxic level estimated as 0.75-1.0 gram; smaller amounts act as emetic or purgative.

SKIN OR EYE CONTACT: Avoid skin or eye contact with dry solids or solutions. In case of skin exposure, wash off with water until yellow color is gone. Remove contaminated clothing and launder before reuse. Wash hands before eating. Causes local skin irritation on prolonged exposure; causes chrome sores in unprotected skin lesions. Irritant to mucous membranes and eyes. If eyes are affected, flush with water for 15 minutes and get medical attention.

EMERGENCY AND FIRST AID PROCEDURES

Section 7 - SPECIAL PROTECTION INFORMATION

VENTILATION AND ENGINEERING CONTROLS: Mechanical exhaust is usually adequate.

RESPIRATORY PROTECTION (Specify Type): Use adequate dust control respirator (face mask) when handling powder. 3M #8710 has been suggested for similar use.

EYE PROTECTION: Goggles or face shield to prevent eye contact by splashing solutions recommended.

GLOVES (Specify Type): Rubber or plastic

OTHER PROTECTIVE CLOTHING AND EQUIPMENT (Specify Type): Protective creams for skin of sensitive individuals often are helpful.

Section 8 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Pick up dry spills and return to container, if clean and uncontaminated. Otherwise dispose thru scavenger or in approved land fill. Mop up liquid spills; reduce chromate with ferrous sulfate or sodium sulfite and neutralize with

WASTE DISPOSAL METHOD: lime, soda ash or caustic soda. Flush residues to drain. Reduce pH of solutions with acids to pH about 2.5, then add sulfite, ferrous sulfate or sulfur dioxide to reduce hexavalent chromium. Add lime or caustic to raise pH to about 8.0, and precipitate insoluble trivalent chromium. Allow to settle. Drain off clear supernatent to waste; dispose of sludge to approved landfill or scavenger service.

Section 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep containers closed and dry. Use fresh clothing daily. Shower after exposure to dust.

OTHER PRECAUTIONS: Normal sanitation, hand-washing, etc. to protect against skin exposure. For industrial use only. Keep out of reach of children.

TRADE NAME AND SYNONYMS: Compound, Industrial Process Water Treating, Dry

ATA

Prepared By: W. M. Morris

Date: 7/78 (Revised 7/81)

Form G-1 4/78

CONFIDENTIAL

MATERIAL SAFETY DATA SHEET

Section 1 – PRODUCT IDENTIFICATION

MANUFACTURER'S NAME	EMERGENCY PHONE NO.
DEARBORN CHEMICAL CO., Subsidiary, W. R. Grace & Co.	312/438-8241

ADDRESS
300 Genesee St., Lake Zurich, IL 60047

CHEMICAL NAME AND SYNONYMS	TRADE NAME OR CODE IDENT.
Cooling Water Treatment (Antifoulant)	DEARBORN® 741

Section 2 – INGREDIENTS

CAS No.	%	EXPOSURE CRITERIA

NON-HAZARDOUS MATERIAL

The product identified in this Data Sheet is NOT a hazardous material within the meaning of Title 29, Code of Federal Regulations 1915, 1916, 1917.

Section 3 – PHYSICAL DATA

BOILING POINT, 760mm Hg	220° F.	MELTING POINT	
SPECIFIC GRAVITY (H_2O = 1)	1.0396	VAPOR PRESSURE	
VAPOR DENSITY (AIR = 1)		SOLUBILITY IN H_2O, % BY WT.	Complete
% VOLATILES BY VOLUME		EVAPORATION RATE, _____ = 1	
APPEARANCE AND ODOR	Brown liquid with no specific odor	pH	6.0

Section 4 – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (and Method Used)	FLAMMABLE LIMITS in AIR, % by VOLUME LOWER	UPPER	AUTO IGNITION TEMPERATURE
None			

EXTINGUISHING MEDIA ☐ Water Fog ☐ Foam ☐ CO_2 ☐ Dry Chemical ☐ Other

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARD

Section 5 – REACTIVITY DATA

STABILITY (Normal Conditions)	CONDITIONS TO AVOID
x Stable ☐ Unstable	

INCOMPATIBILITY (Materials to Avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
☐ May Occur ☒ Will Not Occur	

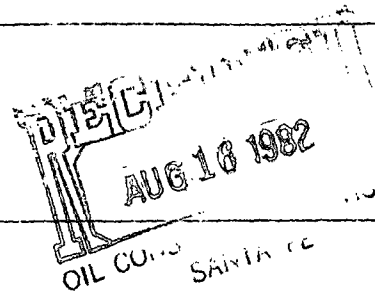
RECEIVED
AUG 16 1982

(over)

...HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE

INHALATION



INGESTION

Harmful if swallowed

SKIN OR EYE CONTACT

If material gets on skin, wash with plenty of water. If eyes are affected, flush with water and get medical attention.

EMERGENCY AND FIRST AID PROCEDURES

Flush off skin with water. For eyes, flood with water. Get medical attention.

If solution is swallowed, induce vomiting using a mild emetic.

Section 7 – SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

RESPIRATORY PROTECTION (Specify Type)

EYE PROTECTION	GLOVES (Specify Type)
Goggles	Chemical gloves

OTHER PROTECTIVE CLOTHING AND EQUIPMENT (Specify Type)

Section 8 SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Flush to drain with water for small spills. Collect for chemical scavenger service disposal for large spills.

WASTE DISPOSAL METHOD

Use chemical scavenger service.

Section 9 – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Keep from freezing. Freezes at 22° F.

OTHER PRECAUTIONS

For industrial use only. Keep away from children.

Additional Data: DOT NOT RESTRICTED: Compound Industrial Process Water Treating, Liquid

Prepared By C. M. Hwa

Date: 5/2/78

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

August 6, 1982

Mr. Oscar Simpson III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Jal No. 4 Plant Brine System
Construction Status Report - July, 1982

Dear Mr. Simpson:

Construction continued on the north brine pond during the month of July. Approximately ten days of construction progress were lost due to heavy rains in the area July 9, 1982; however, the pond is now scheduled for completion and final inspection by August 9, 1982.

No progress has been made in the other brine system areas due to the continued delays in fiberglass tank deliveries. It now appears that the first of the tanks on order may be received during the week of August 9, 1982.

The storage wells could not be removed from service during July; therefore, the new brine transfer pipeline has not been tied into the system. Hopefully, this pipeline can be tied in and placed in service during the month of August.

If you should have any questions concerning the status of these projects, please call.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB/dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

JULY

August 6, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's
Lea County Waste Water Projects
Construction Status Report -
July, 1982

Dear Mr. Simpson:

Construction progress during July, 1982 on the referenced projects is outlined below:

JAL NO. 4 PLANT

Contingency Tank - Although the steel contingency tank received some damage during the heavy rain July 9, 1982, the tank had been repaired, piping tied in and internal coating completed by the week of August 2, 1982.

Injection System - The automatic filter backwash system was placed into service on manual and work is underway on the automatic control system. The system should be in full automatic operation within two weeks.

Sewage Chlorination System - A portion of this system is installed but completion is still delayed pending receipt of fiberglass tanks. If the fiberglass tank is received during the week of August 9, this system could be in full operation very near the scheduled completion date of August 15, 1982.

Plant Operations - The broken valve which was leaking water from the closed cooling system was repaired during the plant shutdown.

JAL NO. 3 PLANT

Sewage Chlorination System - Completion of this system is still delayed, pending receipt of the fiberglass tank.

JAL NO. 1 PLANT

Construction commenced during the month on the drain lines and classifier system. These systems are presently scheduled for completion by September, 1982.

EUNICE PLANT

Construction of the sewage chlorination system was completed during July and the system will be placed into operation as soon as the automatic controls are in full operation. This should be accomplished within the next two to three weeks and waste water deliveries to Rice Engineering should commence during the month of August, 1982.

MONUMENT PLANT

Construction is continuing and the waste water facilities appear to be on schedule for completion by late August. Deliveries to Rice Engineering should commence during September, 1982.

If you should have any questions concerning the progress or status of any of the projects, please call.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie dc

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

July 13, 1982

Mr. Oscar Simpson, III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: El Paso Natural Gas Company Lea County Plants
Waste Water Discharge Plan Information

Dear Mr. Simpson:

Pursuant to your request during our recent meetings, the following drawings, data and information are submitted herewith:

1. Proposed Plant Drain Line Leakage Testing Procedure

2. Drawings Nos. 5004.14-1 and 5004.14-2 with water well locations noted in red.

3. Water treatment chemical data sheets

4. Injection pressure versus injection rate curve for step-rate tests conducted on the Jal No. 4 injection well.

This information completes NMOCD's previously stated requirements for final evaluation and acceptance for advertising of El Paso's Jal No. 4 Plant Waste Water Discharge Plan.

If you should have any questions or wish to discuss any of the enclosed information, please call.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc
Encl.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPART
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

June 4, 1982

El Paso Natural Gas Company
Two Petroleum Center, Suite 200
North "A" at Wadley
Midland, Texas 79701

ATT: D. N. Bigbie

RE: Submittal of specificat
and drawings of the Nor
Pond at Jal Plant #4

Dear Sir:

In regards to your letter of May 26, 1982, with accom
specifications and drawings of the North Brine Pond a
Plant #4, the Oil Conservation Division hereby approv
specifications and drawings for construction.

The Oil Conservation Division, Hobbs District Office
periodic inspections during different phases of const
of the pond. If you will please notify them in advan
construction will begin, their inspections can be smoo
coordinated with construction of the pond.

If you have any questions regarding this matter, pleas
me at (505) 827-2534.

Sincerely,

OIL CONSERVATION DI

Oscar Simpson
Water Resource Spec

OS:nm

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

July 1, 1982

Mr. Oscar Simpson, III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: Jal No. 4 Plant Brine System
Construction Status Report -
June, 1982

Dear Mr. Simpson:

Construction commenced on the north brine pond (ponds Nos. 10 & 11) during the first week in June. The silt/salt buildup was removed and hauled to the City of Jal approved disposal area. The old liner was removed on June 28 and the center berm which separated the two original ponds was being removed the following day.

The liner contractor is scheduled to visit the site on Friday, July 2, to evaluate the condition of the soil in the bottom of the ponds and present a construction schedule. All material for this installation is on order.

The brine retention curb was installed in the south brine pump house; however, the overall brine collection systems in both pump houses are presently delayed pending receipt of the fiberglass sumps.

The fiberglass brine surge tank delivery has been delayed and is now three weeks late. The old brine surge tank is out of service, however, and there is no danger of leakage at that location.

Manufacturers are apparently experiencing difficulty in satisfying the demand for fiberglass products, as all fiberglass products presently on order from three separate sources for these jobs are delayed. Efforts are being made to expedite deliveries of these items. Installation of all tanks and sumps should be completed during July if the material is received within the next two weeks.

The brine transfer pipeline has been fabricated and is in place beside the old line. The new line will be tied in when the brine wells can be removed from service, probably during the first two weeks of July.

The portions of the brine system already completed prevent any leakage of brine onto the ground during any normal operations at the Jal No. 4 Plant.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

July 1, 1982 JUNE

Mr. Oscar Simpson, III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: El Paso Natural Gas Company's Lea County
Waste Water Disposal Projects Construction
Status Report - June, 1982

Dear Mr. Simpson:

The current status of El Paso's Lea County Waste Water Disposal Projects are as follows:

Jal No. 4 Plant

Contingency Tank - Tank construction, external coating and back-filling were completed during the week of June 28. The piping is in place and will be tied in during the July 12 plant shutdown. Internal coating will be completed during the week of July 7.

Injection System - No construction work on this system during the month.

Sewage Chlorination System - Material orders for this system were delayed and, combined with the delivery problems being encountered with the fiberglass contact tank, it now appears that completion of the chlorination system at Jal No. 4 will be delayed until August 15, 1982.

Plant Operations - Pursuant to discussions during your visit of June 17, 1982 our engineering personnel are working with plant operating personnel to install a temporary collection system to route the water leaking from the broken valve on the closed cooling system to the nearest plant drain line.

Jal No. 3 Plant

Chlorination System - Drawings have been completed and all material has been ordered for the chlorination system at Jal No. 3 Plant.

All material has been determined to be readily available except for the fiberglass contact tank. As a result, the projected completion date for this installation is now August 1, 1982.

Company work orders for relocating the drain line presently dumping into the flare condensate pit and for installing an additional filter on the injection system will be issued in early July.

Jal No. 1 Plant

There was no construction at this location during the month of June.

Construction of the drain lines and classifier system should commence by mid-July, 1982.

Eunice Plant

El Paso's waste water discharge line was tied into the Rice Engineering system and deliveries should commence by July 15, 1982, upon completion of the sewage chlorination system and activation of system controls.

Monument Plant

Rice Engineering notified El Paso on June 29, 1982 that capacity will be available in its system to accept the Monument waste water, tentatively by late August, 1982.

Construction of the plant waste water handling systems is continuing on schedule and should be completed by the date that Rice Engineering can accept the plant discharge.

We regret that the projected completion dates for the Jal No. 3 and Jal No. 4 chlorination systems have slipped and will exert additional effort to expedite deliveries of the fiberglass tanks and complete these installations as early as possible.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to the
Division Superintendent

DNB:dc

El Paso Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

June 2, 1982

Oscar Simpson III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: Discharge Plan for El Paso Natural Gas Company's
Jal No. 4 Plant

Dear Mr. Simpson:

For response to your letter of January 11, 1982 requesting additional information for the Jal No. 4 Discharge Plan, specifically the closure of ponds, the enclosed Addendum to the Closure Plan for Jal No. 4 Plant is submitted. This Addendum amends the Closure Plan submitted to your office August 7, 1981.

El Paso believes that the enclosed Addendum and other information conveyed to you in Mr. D. N. Bigbie's letter of April 28, 1982 provide adequate information for your office to approve the Jal No. 4 Discharge Plan.

If you should have any questions, please contact me.

Sincerely,

E. F. Smythe

E. F. Smythe, P.E.
Chief, Permits & Support
Environmental Affairs Department

jb

Enclosure

cc: D. N. Bigbie - Midland

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

June 1, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Jal No. 4 Plant Brine System Construction
Progress Report - May, 1982

Dear Mr. Simpson:

Rebuild of the south brine pond (pond No. 9) was completed on May 17, 1982, and inspected by New Mexico Oil Conservation Division personnel on May 18, 1982.

During the week of May 17, 1982, nearly all brine from the north ponds was injected into the hydrocarbon storage wells. When displaced from the wells, the brine will be returned to the new (south) pond; therefore, use of the north ponds for brine storage was effectively discontinued by May 24, 1982.

Engineering drawings and construction specifications were completed and submitted during the week of May 24, 1982, to contractors to obtain quotations for rebuild of the north pond. The completion date for the north pond is still uncertain due to the lack of knowledge about the moisture content of the soil below the pond liner. A firm schedule will be prepared during June, 1982, as soon as the old liner is removed.

The brine collection system in the north brine pump house was complete when the pump house was inspected on May 25, 1982. Work was underway at that time on forms for the new brine pump foundations. The drain, sump and transfer pump installations should be completed by June 15, 1982. Upon completion of the north pump house the same installations will be made in the south pump house.

The brine surge tank is scheduled for delivery during the week of May 31, 1982 and the installation should be completed by June 15, 1982.

Several brine transfer pipelines in the area are being replaced due to excessive leaks in the old lines. These replacements will be completed within the overall brine system construction period.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to
Division Superintendent

DNB:dc

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

MAY

June 1, 1982

Mr. Oscar Simpson, III
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company's Lea County Waste Water Disposal Projects - Construction Status Report - May, 1982

Dear Mr. Simpson:

Jal No. 4 Plant -

1. Contingency Tank - Construction of the steel contingency tank commenced May 18, 1982 and, although delayed by recent heavy rains in the area, is progressing on schedule to provide completion of the installation by June 18, 1982. Excavation had been completed and the gravel foundation for the tank was in place when I visited the site on May 25, 1982. Tank material was on site.

2. Injection System - A bypass filter with switching valves and backflush system was installed prior to May, 1982 on the waste water injection system to prevent system shutdowns due to filter clogging. A high level shutdown system has been installed on the injection system surge tank to stop the classifier transfer pumps in the event of high level in the surge tank. In the event of high level shutdown, water from the classifier will be diverted into the contingency tank until the surge tank level decreases to normal, at which time normal system operation will be resumed. This feature will prevent surge tank overflow and discharge of waste water into outside tanks or pits at the injection area.

3. Sewage Chlorination System - Work orders have been issued and material has been ordered for the domestic sewage effluent chlorination systems which will enable El Paso to inject the sewage effluent with the remainder of the plant waste water. Material deliveries of six weeks have been quoted and the overall system installation should be completed by July 15, 1982.

4. Ponds - All ponds at Jal No. 4, except for Pond No. 1 (sewage effluent) are being maintained dry of any plant waste water. Water which accumulates in Pond No. 3 due to rains is pumped into the injection system at the earliest opportunity.

The Pond Closure Plan has been reviewed by Permian Division and comments have been submitted to our Environmental Affairs Department (EAD). The plan will be revised and the final draft submitted to the New Mexico Oil Conservation Division by EAD personnel.

Jal No. 3 Plant -

No actual construction activity during May, 1982.

Work orders have been issued and material has been ordered for the domestic sewage chlorination system. The system installation should be completed by July 15, 1982.

Jal No. 1 Plant -

El Paso completed its 4" pipeline from the Jal No. 1 Plant to the City of Jal sewage treatment plant. No further construction activity took place at this location during May, 1982. Construction of the waste treatment system and consolidation of the drain lines is planned to commence in June, 1982.

Eunice Plant -

El Paso completed installation of the classifier and filter systems during May, 1982. Rice Engineering completed its pipeline to the plant during the month and is awaiting tie-in to El Paso's discharge line. El Paso must wait until the chlorination system for the sewage effluent is operational to begin deliveries into the Rice Engineering system; therefore, actual deliveries will not commence until July 15, 1982.

Monument Plant -

Construction of the waste water classifier system commenced May 12, 1982. By the end of the month the classifier and oil tanks were installed and backfilling around the vessels had been completed. The pump house foundations and electrical power equipment installation had also been completed.

Latest reports indicate that Rice Engineering's system will not be ready to accept discharges from this plant until late August, 1982. The

Monument Plant system should be complete by that date.

If you should have any questions concerning information presented herein, please notify me.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to
Division Superintendent

DNB:dc

El Paso Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

May 27, 1982

Mr. Oscar Simpson III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company
Jal No. 4 Plant Discharge Plan

Dear Mr. Simpson:

During our meeting of May 4, 1982, you requested additional information from El Paso to enable the Oil Conservation Division to complete its evaluation of the Jal No. 4 Discharge Plan. Information requested includes:

1. Engineering drawings for the proposed contingency tank and associated pump and piping systems.

2. Coating specifications for the contingency tank internal and external coating system.

3. A contingency plan for operation of the overall disposal system to assure a continuous, approved means of disposing of the Jal No. 4 waste water discharge.

4. A pond closure plan containing results of analyses of sludge samples obtained from all Jal No. 4 ponds, as well as proposed construction procedures for closure of the ponds.

Pursuant to your request, the following information is enclosed:

1. El Paso Natural Gas Company drawings:

   1J4-1-P27 Classifier Area Piping Plan
   1J4-1-P44 Contingency Tank Area Piping Plan
   1J4-1-P45 Contingency Tank Piping Details Plan
   1J4-1-P46 Classifier and Flare Line Piping Plan
   1J4-1-P47 Chlorinator Station and Drain Area Piping Plan

2. El Paso Natural Gas Company Paint Systems specification sheet for a coal tar epoxy coating system. This system will be applied to the internal and external surfaces of the contingency tank.

3. Contingency plan for operation of the Jal No. 4 waste water disposal system.

The pond closure plan is being prepared by our main office Environmental Affairs Department and will be forwarded directly from that department to your attention.

During our telephone conversation of May 18, 1982, you requested that El Paso also include in its contingency plan a proposal for guaranteeing that underground drain lines and collection systems are not leaking. Based on our preliminary evaluation of this requirement, we propose to conduct an annual pressure test of these lines and systems, similar to the test procedures which you indicated were used by other companies to satisfy this requirement. Our engineering personnel are presently evaluating the actual requirements for implementing such a test at Jal No. 4. A plan for conducting the tests will be prepared upon completion of the evaluation.

I trust the above information and the enclosures satisfy the remaining requirements for acceptance by the Oil Conservation Division of El Paso's Jal No. 4 Discharge Plan.

If you should have any questions relative to this response, please notify me.

Sincerely,

EL PASO NATURAL GAS COMPANY

Don Bigbie

Don Bigbie
Administrative Assistant to
Division Superintendent

DNB:dc
Encl.

JAL NO. 4 PLANT
WASTE WATER DISPOSAL SYSTEM

OPERATING CONTINGENCY PLAN

Waste water disposal at El Paso Natural Gas Company's Jal No. 4 Plant is accomplished by injection into an approved disposal well. The waste water is passed through a classifier system for removal of oils and then filtered before it is injected into the well. The following information outlines El Paso's plans and preparations for assuring operational integrity of the overall system to prevent discharge of waste water onto the ground surface.

1. Injection Pumps

   Only two pumps are required for the injection rates at Jal No. 4. Three pumps are installed to provide a stand-by spare.

2. Waste Water Filters

   A bypass filter was recently installed with switching valves and a backwash system to prevent system shutdowns due to filter plugging.

3. Classifier Discharge Pumps

   Two pumps, one of which is a full capacity spare, are installed for transfer of fluids from the classifier tank to the injection system surge tank.

4. Contingency Tank

   The contingency tank will have two sump pumps, one of which is a full capacity spare, to transfer fluids back into the classifier tank.

   In the event of a system shutdown of more than 48 hours due to a well workover or unforeseen problems, the Jal No. 4 waste water would be transported by tank truck to the Jal No. 3 disposal well or other acceptable disposal site.

May 26, 1982

TABLE 485-13
PAINT SYSTEMS, EXTERIOR SURFACES OF STORAGE TANKS AND VESSELS INSTALLED ON BUREAU OF LAND MANAGEMENT (BLM) RIGHT-OF-WAY

MANUFACTURERS	MOBIL	MISSION
MAXIMUM OPERATING TEMPERATURES	250°F (121°C)	800°F (427°C)
SURFACE PREPARATION	Near White Metal #2	Near White Metal #2
COATS		
FIRST COAT	#13-F-22/In Appropriate Color - Zinc Rich Modified Alkyd - Thinner #7-T-39	#2241/In Appropriate Color - Zinc Rich Styrene CoPolymer and Modified Silicone Alkyd Thinner #2400 or #2300
Dry Film Thickness (mils) (mm)	3.0-5.0 (0.075-0.125)	3.0-5.0 (0.075-0.125)
Recoat Time in Hours	24	24
Application Method	Spray or Brush	Spray or Brush
SECOND COAT (When necessary)	#13-F-22 in Appropriate Color - Zinc Rich Modified Alkyd - Thinner #7-T-39	#2241 in Appropriate Color - Zinc Rich Styrene CoPolymer and Modified Silicone Alkyd Thinner #2400 or #2300
Dry Film Thickness (mil) (mm)	3.0-5.0 (0.075-0.125)	3.0-5.0 (0.075-0.125)
Application Method	Spray or Brush	Spray or Brush

*****

TABLE 485-12
PAINT SYSTEMS, EXTERIOR BOTTOMS OF ALL GROUND STORAGE TANKS[1]

MANUFACTURERS	PORTER	CEILCOTE
PREPARATION	White Metal No. 1	White Metal No. 1
COATS		
PRIMER	Porter "Tarset" Standard Coal Tar Epoxy (Red) Amine Cured	Flake Tar Coal Tar Epoxy Amine Cured
Dry Mil Thickness (mm)	8.0-9.0 (0.20-0.23)	8.0-9.0 (0.20-0.23)
Recoat Time In Hours	8-24	8-24
Application Method	Spray	Spray
SECOND COAT	Porter "Tarset" Standard Coal Tar Epoxy (Black) Amine Cured[2]	Flake Tar[2] Coal Tar Epoxy Amine Cured
Dry Mil Thickness (mm)	8.0-9.0 (0.20-0.23)	8.0-9.0 (0.20-0.23)
Recoat Time In Hours	8-24	8-24
Application Method	Spray	Spray
THIRD COAT	None	None
SYSTEM SOLVENT	Tarset Thinner #T-13	T-460 Above 60°F T-470 Below 60°F
TOTAL MIN./MAX. DRY MIL THICKNESS/SYSTEM (mm)	16.0-18.0 (0.41-0.46)	16.0-18.0 (0.41-0.46)

[1]Coating materials for these tanks shall be specified by the Company's Engineering Department in accordance to the specific requirements of the particular vessel as the operating conditions become known. All exterior bottoms of storage tanks resting on ground.

[2]Finished system shall be allowed to cure a minimum of 72 hours before being placed on the ground.

El Paso Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

May 26, 1982

Mr. Oscar Simpson, III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Jal No. 4
North Brine Pond Construction

Dear Mr. Simpson:

During our telephone conversation of May 18, 1982, we discussed the acceptability of modifying the detection system design for the north brine pond to utilize gravel filled trenches in which the laterals would be located. The gravel filled trenches would be used in lieu of the continuous gravel fill across the base of the entire pond. All other design aspects of the pond would remain the same as those of the south pond.

Enclosed are prints of El Paso Natural Gas Company drawings Nos. 1J4-8-P285, 1J4-1-M35, 1J4-1-M36, and 1J4-1-M37 and one set of the job specifications for the north pond. These drawings and specifications illustrate the gravel filled trench design outlined above.

Please review the enclosed drawings and specifications and advise as to the acceptability of the gravel filled trench design for the north brine pond. In order to expedite completion of the north brine pond, El Paso has already submitted these plans and specifications to contractors to obtain bids; therefore, we request your earliest possible review and decision relative to this request.

Thank you for your cooperation in this matter.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to
Division Superintendent

DNB:dc
Encl.

SCOPE OF WORK

EXHIBIT "A"

JAL NO. 4 PLANT

I. Location

Jal No. 4 Plant is located approximately eleven (11) miles north of Jal, New Mexico on State Highway 18.

II. Job Description

The total job shall include, but not be limited to, the following:

A. Removal of existing Gulf-Seal asphalt liner;

B. Repair and rebuilding of existing pond bottom and walls as required;

C. Installation of Underliner, Leak Monitoring System and Hypalon Primary Liner;

D. Fabrication and installation of various nozzles, openings, detection wells and all other items necessary to make the system operational.

Drawings indicating the work to be done, are:

1J4-1-M35

1J4-1-M36

1J4-1-M37

1J4-8-P285

III. Move-In and Site Preparation

1. Before moving equipment or personnel to jobsite, the contractor shall be certain of fabrication and material storage area. This location will be by mutual agreement between plant superintendent, contractor and project inspector.

2. Except for unusual conditions, paved areas of the plant yard will not be used for equipment, material or construction office unloading, or storage, without explicit permission from project inspector.

   a. If these areas must be used, contractor, at his own expense, will repair and return to original condition any areas damaged or altered during these operations.

3. Existing roads will be maintained while construction is in progress and, upon completion, will be left in a state of repair acceptable to the plant superintendent and project inspector.
4. Contractor is hereby notified that all known lines, conduits and other equipment in the construction area are shown on the drawings furnished by the company, but contractor will proceed with caution when excavating or operating equipment in this area to avoid damage to lines yet unknown at this time.
    a. Contractor will be responsible for any damage to any of above mentioned lines or facilities and will notify the project inspector or project engineer immediately upon location of or damage to any underground line encountered.

IV. General Conditions

1. The contractor shall furnish all labor, tools, supplies and equipment necessary to perform the site preparation, excavation, filling, compaction and grading as shown on drawings or as described herein and as needed whether or not specifically stated to obtain a complete and satisfactory job.
2. The contractor shall establish all lines and grades necessary for execution of specified work.
3. In regard to technical aspects of the Work, the project engineer will be the Company's Representative and will have sole authorization to make changes in specified procedures or materials.
4. Upon completion and acceptance of work, the contractor shall promptly remove all equipment, excess materials, and supplies from work area and shall leave the site in satisfactory condition.
5. During the course of the job it will be necessary for a Representative from the New Mexico Oil Conservation Department (NMOCD) to inspect and approve various stages of construction. To minimize delays in construction, the contractor shall submit a tentative completion schedule

for each of these stages so inspections can be scheduled to coincide with the ongoing work.

6. The project engineer shall reserve the right to reject any of the contractor's equipment which he deems unsuitable or inadequate for the job or which is unsafe. The contractor shall be required to replace rejected equipment with suitable equipment.

V. Earth Work Specifications

1. The contractor shall make maximum use of soil materials in existing pit walls and bottom. If additional material is required, contractor will be required to transport this material to jobsite from an offsite source as specified by Company Representative. Excess soil materials will be relocated to areas near job site as directed by project inspector.
2. Any cut in the existing pit walls will be refilled with material removed from that cut and will be compacted as hereinafter described.
3. All fill will be placed in approximately horizontal layers measuring not more than 6 inches in thickness prior to compaction, but will be provided with sufficient longitudinal and transverse slope to provide for runoff of surface water from every point of fill.
4. The moisture content of each layer shall be determined to be suitable for compaction, or shall be brought to suitable condition by measures as specified, by the Construction Inspector. Compaction of each layer shall be continuous over its entire area to insure that required density has been obtained.
5. Compaction of the fill material shall continue until a density value of not less than 95% of maximum density (in accordance with ASTM B698, STD. Proctor, as determined by soils testing lab) has been obtained.
6. All testing required in this section will be performed by an established, independent laboratory at the expense of the Company. Should any test certificate indicate inadequate compaction, the contractor shall remove any and all material which has been placed

above the layer in which the certificated test was performed and reconstruct that section of the fill in an approved manner at his own expense.

7. No fill material shall be placed, spread or compacted while it is frozen or thawing during unfavorable weather conditions. When work is interrupted by heavy rain, fill operations shall not be resumed until the Soils Engineer or Company Representative indicates that moisture content and density of the previously placed fill are as specified.
8. The finished subgrade, or finished liner receiving surface, shall contain no low spots or depressions and shall be smooth and free of irregularities. This surface shall contain no rocks, gravel, sludge, or trash, which, in any way, could damage the Under Liner.
9. All slopes and grades will be in accordance with drawings 1J4-1-M35, 1J4-1-M36, 1J4-1-M37.

VI. Pond Liner and Leak Detection System

1. The Liner Fabricator shall furnish all supervision, labor, insurance, equipment tools and materials for manufacturing and installing Underliner, Monitoring System, and Primary Liner.
2. All materials shall be as specified hereinafter and on accompanying drawings. Changes, if any; shall be in accordance with Section 4, Item 3.
3. Underliner shall be 30 mil oil resistant polyvinyl chloride and shall be produced as to be free of holes, undispersed raw materials, blisters or tears. Any defect shall be repaired using elastomer sheeting and manufacturer's approved adhesive with overlap of at least 4 inches beyond defective area.
    a. Factory seams shall be heat welded and provide a film tearing bond.
    b. Field seams shall be in accordance with material manufacturer's approved methods, and not less than 4 inches in width.

4. Primary Liner shall be 45 mil (nom.) thick, B. F. Goodrich 45 HP6 "Flexseal" polyester reinforced Hypalon material. Material shall be so produced so as to be free of holes, undispersed raw materials, blisters or any sign of delamination. Any such defect shall be repaired using the elastomer sheeting and the manufacturer's approved adhesive with overlap of at least 4 inches beyond defective area.

   a. Factory seams shall be heat welded and provide a film tearing bond.

   b. Field seams shall be in accordance with material manufacturer's approved methods and not less than 4 inches in width.

   c. All seams upon completion shall be visually inspected and any questionable area(s) repaired.

5. Monitoring System (Leak Detector) will be installed as shown on accompanying drawings: 1J4-1-M35, 1J4-1-M36, 1J4-1-M37.

   a. Laterals will consist of 4 inch diameter perforated PVC pipe, SDR-41. Perforations will be 2 - 5/8" diameter holes drilled 120^{o} apart, on 5 inch centers the entire length of each joint. Pipe will be installed with holes on bottom, and sloped toward headers at 6"/50' (min).

   b. Gravel shall be 1 inch diameter washed gravel with no more than 2.7% passing thru No. 4 screen, in accordance with certified sieve analysis. Crushed rock will not be used.

   c. Sand shall be washed sand with no more than 1% passing thru a No. 200 sieve size in accordance with certified sieve analysis.

   d. Soil support fabric shall be "Marifi 140N", nonwoven drainage fabric as manufactured by Celanese Fibers Marketing Co.

   e. Fabric underlay between the Under-Liner and Primary Liner on the slopes shall be 190 mil (min) "FIBRETEX 600" Geotextile Underlay, nonwoven fabric as manufactured by Crown Zellerbach, Inc.

f. Detection wells (sump) shall be fabricated ¼" thick (min) reinforced fiberglass tanks, 48" O.D. X 12' overall with fitted lids.

g. All PVC pipe shall be joined by solvent weld slip-joints.

VII. Final Inspection and Acceptance

In addition to all other inspections mentioned in these specifications, the contract or contractor's bid, a final inspection shall be made by the contractor, Company Representative and N M O C D Representative to assure finished job meets all contractual agreements and satisfies State Environmental Requirements for a facility of this type. If inspection indicates no leakage and all other parts of installation are satisfactory, the Liner will be accepted.

VIII. Warranty

The installed Liner/System shall be guaranteed in writing against defects in material and workmanship for a period of not less than ten (10) years.

IX. Changes

If, subsequent to periodic inspections made by the N M O C D Representative, major design or construction changes are required, negotiations will be conducted at that time to the satisfaction of both Contractor and Company and appropriate contract change orders issued.

X. Subcontractors

1. Contractor shall obtain written approval of all subcontractors and subcontracts let on any portion of the work to be done.
2. No such approval shall relieve the contractor from any of the obligations of this contract to Company. Contractor shall be and remain liable as if no such subcontract had been made or approved by company.

XI. Qualification and Permits

1. The contractor must hold a current New Mexico contractor's license and meet all of the general conditions specified on the back of the operating contract.

2. Contractor shall procure any permits which may be required for performance of this work at its own expense.

WELLS EFFECTIVE AS OF SEPTEMBER, 1981

F-101 DATA IT DATE	COMPLETION DATA STAT MO/YR	T-A AGEING DATA	WELL TYPE		
P. O. BOX 1492			EL PASO		TX 79978
10/11/53	LPG 08/67				
4/28/60	LPG 04/60				
4/28/60	LPG 04/60				
10/16/52	LPG 04/60				

EL PASO Storage Wells LPG

LPG STORAGE

WELL DESCRIPTION FORM	FOOTAGE	COUNTY	DIST	LAND	LEASE	ST
OPERATOR - EL PASO NATURAL GAS COMPANY						
2 M 32 23S 37E	S 100 W 280	25	I	S	STATE	
4 M 32 23S 37E	S1000 W1230	25	I	S	STATE	
3 M 32 23S 37E	S1000 W 530	25	I	S	STATE	
1 M 32 23S 37E	S 450 W 780	25	I	S	STATE	

Elpaso ~~Gas~~ storage wells
LPG at Jal #4

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

May 26, 1982

Randall T. Hicks
New Mexico Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503

Re: Domestic Sewage Discharge Plans for El Paso Natural Gas Company's Eunice, Jal No. 3, Jal No. 4, and Monument Plants

Dear Mr. Hicks:

Domestic Sewage Discharge Plans for El Paso Natural Gas Company's Eunice, Jal No. 3, Jal No. 4, and Monument Plants were submitted to the New Mexico Environmental Improvement Division under cover letters dated March 31, 1982, October 1, 1981, and April 6, 1982. Additionally, addendums to the plans were submitted at various dates.

Following receipt of your April 14, 1982 letter addressing the Jal No. 4 Discharge Plan and the subsequent meeting that Mr. John Eichelmann and I attended in your Santa Fe office on May 4, 1982, El Paso re-evaluated its sewage disposal proposals based on the potential additional requirements and uncertainties associated with the leach field arrangements.

El Paso's further evaluations have resulted in a decision to chlorinate and inject the sewage effluent into the waste water disposal systems at all plants; therefore, we respectfully request withdrawal of the Domestic Sewage Discharge Plans as previously submitted for your consideration and approval.

We understand from the discussions of our May 4, 1982 meeting in your office that El Paso's decision to discharge the sewage effluent with the plant waste water will result in the transfer of regulatory jurisdiction for this operation from the New Mexico Environmental Improvement Division to the New Mexico Oil Conservation Division.

If anything further is required from El Paso to effect the withdrawal of these plans, please notify me. Your assistance and cooperation in this matter is greatly appreciated.

Sincerely,

EL PASO NATURAL GAS COMPANY

D. N. Bigbie

D. N. Bigbie
Administrative Assistant to
Division Superintendent

DNB:dc

Distribution:

M. E. McEuen
J. W. Cronenberg
H. Reqiquam
F. Smythe
R. H. Lovell
John Eichelmann, Jr.

Oscar Simpson
NMOCD - Santa Fe, N. M.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

May 4, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

El Paso Natural Gas Company
Two Petroleum Center
Suite 200
North "A" Wadley
Midland, Texas 79701

Attention: M. E. McEuen

Re: Discharge Plan for El Paso Natural Gas Company, Jal No. 4 Plant, LPG Brine Storage Facilities

Dear Mr. McEuen:

I am writing this letter to bring to your attention certain matters which appear to constitute serious violations of rules and regulations administered by the New Mexico Oil Conservation Division as they relate to the above-referenced facility. I believe that a review of your records will indicate a series of correspondence relating to this matter beginning in April or May of 1981, and this letter is written because of the unsatisfactory response to the request of Division personnel which were contained in that correspondence.

It appears from our records that the brine storage ponds at this facility have developed serious cracks and are discharging brine water into underlying strata, some of which contain waters which are used for domestic, agricultural, and livestock purposes. After discussions of this problem with Division personnel, by letter dated October 28, 1981, the Division granted El Paso Natural Gas six months in which to correct these very serious deficiencies. That time frame ended on April 28, 1982.

Based upon correspondence dated April 28, 1982, to the Division Water Resource Specialist, it appears that this effort by the Oil Conservation Division to cooperate with El Paso to the maximum extent possible has been disregarded, if not taken advantage of. By that letter which is dated the same date as the six month period ended, the Division is informed that one of three ponds is now scheduled to be completed by May 15 and

two other ponds (Nos. 10 and 11) will be worked on "as soon as possible following completion of pond No. 9". We find this lack of adequate and timely response to be completely unsatisfactory.

As you are aware, the present operations at this facility are currently in violation of both the rules and regulations of the New Mexico Oil Conservation Division and the Water Quality Control Commission regulations which the OCD is empowered to enforce. Specifically, discharge of these brine waters into the leaking ponds is in direct violation of Rule 703 of the Rules and Regulations of the New Mexico Oil Conservation Division which states in part:

> "Injection projects, including injection wells and producing wells and all related surface facilities shall be operated and maintained at all times in such a manner as will confine the injected fluids to the interval or intervals approved and prevent surface damage or pollution resulting from leaks, breaks, or spills.
>
> Failure of any injection well, producing well, or surface facility, which failure may endanger underground sources of drinking water, shall be reported under the 'Immediate Notification' procedure of Rule 116."

Clearly, El Paso has been in violation of this rule for an extended period of time and certainly El Paso has not been relieved of any responsibility for any date beyond April 28, 1982.

In addition, since the operations at this facility are not exclusively subject to the control of the Oil and Gas Act since such brine "does not result from the production of oil and gas" (letter to Richard L. Stamets dated July 6, 1981) these discharges are also in violation of the Water Quality Control Commission regulations. Specifically, you are referred to Section 3-104 of such regulations which states:

> "Unless otherwise provided by these regulations, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly

into ground water unless he is discharging pursuant to a discharge plan approved by the Director. When a plan has been approved, discharges must be consistent with the terms and conditions of the plan."

Although your letter to Mr. Stamets of July 6, 1981, may not meet the formal variance requirements of the Water Quality Control Commission regulations, it was treated as a request for such variance and in effect an informal variance was granted until April 28, 1982. That time has now passed. Therefore, it appears that El Paso Natural Gas Company is in violation of the Water Quality Control Commission Regulations and has been in violation of these regulations since at least April 28, 1982.

Under the provisions of the New Mexico Oil and Gas Act (Section 70-2-31) and the New Mexico Water Quality Act (Section 74-6-10) violations of these Acts are punishable by civil penalties of up to $1,000 per day for each day of each violation. It appears that El Paso Natural Gas may therefore be subject to a civil penalty of $2,000 per day for each day since April 28, 1982.

Prior to requesting that this or other legal remedy be pursued, I request that you or other representatives of El Paso Natural Gas Company demonstrate any valid reasons which you may have for your apparent disregard of the directions of the representatives of this agency and also provide to this agency a firm commitment to a definite time schedule for completion of all of the this badly needed remedial work as quickly as possible. This request for firm time frame commitments is necessitated by the failure of El Paso to commence remedial action to meet previously established deadlines.

Thank you for your prompt attention to this matter and your prompt correction of these deficiencies.

Sincerely,

JOE D. RAMEY,
Director

JDR/WPP/dr

El Paso
Natural Gas Company

MIDLAND PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701
PHONE: 915-682-5701

April 28, 1982

Oscar Simpson III,
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company
Jal No. 4 Plant
Brine Storage Facilities

Dear Mr. Simpson:

The following information will confirm that conveyed during our telephone conversation of April 16, 1982 and supplement Mr. M. E. McEuen's March 10, 1982 response to your letter of January 11, 1982.

Brine Storage Ponds - Construction efforts to rebuild the south brine storage pond (pond No. 9) to O.C.D. specifications commenced on April 7, 1982 and are now expected to be completed no later than May 15, 1982. Inspections at designated construction phases are being coordinated with Mr. Jerry Sexton of your Hobbs office, as you requested.

Rebuild of the north brine ponds (Nos. 10 and 11) will begin as soon as possible following completion of pond No. 9. Necessary funds have been allocated for this project, and the only uncertainty affecting the schedule at this time is the condition of the soil below the present liners. If seepage through the liners has occurred, some drying time may be necessary before the actual rebuild can begin.

Brine Pump Houses - Bonded fiberglass collection system designs for the two (2) brine pump houses are being discussed with fiberglass contractors and quotations will be requested for the system selected. As soon as a contractor is selected, an estimated completion date for the collection systems will be submitted. In the meantime, efforts are being made to monitor the pump seals regularly to prevent brine leakage.

In order to satisfy operational needs which were recently identified, El Paso is now planning, as a part of the overall project, to replace the existing three (3) pumps in the pump house located between ponds Nos. 3 and 8 with two larger pumps and to replace the pump in the pump house located south of pond No. 9 with one (1) larger pump. El Paso is investigating the availability of new type pump seals offering greater mechanical reliability and protection against brine leakage than those on the present pumps at this location.

Brine Surge Tank - The brine surge tank located adjacent to the brine pump house between ponds Nos. 3 and 8 will be replaced with a new fiberglass tank. The estimated comple - tion date for the installation of the tank and its associated brine collection system is June 15, 1982.

If you should have any questions concerning the brine storage and handling system, please contact me.

Sincerely,

EL PASO NATURAL GAS COMPANY

Donald N. Bigbie

Donald N. Bigbie
Admin. Ass't to Division Superintendent

DNB:dc

CC: B. J. Matthews
M. E. McEuen
K. W. Corder
J. W. Cronenberg
J. F. Eichelmann, Jr.
D. J. Mobbs
H. Reiquam
E. F. Smythe

El Paso
Natural Gas Company

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701
PHONE: 915-684-5701

April 28, 1982

Oscar Simpson III
Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: El Paso Natural Gas Company
Jal No. 4 Plant
Discharge Plan

Dear Mr. Simpson:

The following information will confirm that conveyed to you during our telephone conversation of April 16, 1982 and supplement Mr. M. E. McEuen's letter response of March 10, 1982 to your letter of January 11, 1982.

Cooling Towers - As reported in Mr. McEuen's letter, the level control valves in the cooling tower basin make-up water lines have been repaired and the levels reset. During my visit to Jal No. 4 Plant on April 14, 1982, I observed that the water levels were well below the top of the cooling tower basin and there was no evidence of any splashover.

An organic zinc cooling tower water treatment system is now in use at this plant. All storage containers for the chromate material which was previously used will be removed from the plant site by May 1, 1982 by Continental Products of Texas.

Ponds - During my visit to the Jal No. 4 Plant on April 14, 1982, I observed that ponds Nos. 2, 4, 5, 6, 7, and 8 were completely dry on the surface and pond No. 3 had only a very small amount of liquid in the lowest part of the pond (east side of the pond and due west of the brine pump house). Temporary berms had been constructed to prevent runoff into these pond areas.

Pond No. 1 was still receiving sewage effluent pending receipt of approval from the New Mexico E.I.D of El Paso's Domestic Sewage Discharge Plan and subsequent construction of the alternate sewage disposal system. Material has been received and every effort will be made to expedite installation of the proposed drain field upon receipt of necessary approvals.

El Paso will install a steel tank below grade for use as a contingency pond in lieu of using ponds Nos. 3 and 3A as originally proposed. The tank to be installed just northeast of the classifier tank in an area now contained within the No. 3 pond, will be round with an outside diameter of 60'-0", a seam to seam distance of 16'-0" and a distance of 10'-3" from the bottom of the tank to the bottom of the emergency inlet. Rated capacity of the tank is 5035 barrels. The tank will be coated internally and externally with a four (4) coat Plasite system. Quotations for the tank have been received and installation is tentatively scheduled for completion by mid June, 1982.

Reference was made in your January 11 letter to "drying, removing and storing of the sludge from ponds Nos. 5, 6, 7, and 8 with the rest of the pond sludge as per El Paso's Closure Plan". Results of analyses of sludge samples obtained by Mr. Forrest Sprester of our El Paso Environmental Affairs Department indicate that these pond areas contain no hazardous wastes as defined by EPA under RCRA; therefore, El Paso proposes to leave the dry sludge in place.

Plant Valves and Drainage System - A walk through the Jal No. 4 Plant during my visit on April 14, 1982 disclosed that nearly all of the leaking valves, etc. which were noted during your earlier visit had been repaired, with the few remaining items (primarily broken valves) scheduled for replacement during the annual plant shutdown in July, 1982.

The only other plant areas noted as requiring attention were (1) the water treating area, where the water treater overflow has now been repaired and a new drain system to handle the softener backwash has been installed, and (2) the caustic heat exchanger area, for which a work order has been issued to rebuild the curb and drain apron in the area and to tie the drain into the plant low pressure drain system.

Storage Well Tracer Log - The final item referenced in the attachment to your letter of January 11 pertained to the inspection log for disposal well SWD-214. It is my understanding that this log was delivered to your Hobbs Office on February 17, 1982.

We believe we are now making rapid progress toward the resolution of all problems associated with water discharge at our Jal No. 4 Plant, and trust that these accomplishments and final plans satisfy the O.C.D. requirements for approval of the Jal No. 4 Discharge Plan.

If you should have questions or require additional information relative to any of these items, please contact me.

Sincerely,

EL PASO NATURAL GAS COMPANY

Donald N. Bigbie

Donald N. Bigbie
Admn. Ass't to Division Superintendent

DNB:dc

CC: B. J. Matthews
M. E. McEuen
K. W. Corder
J. W. Cronenberg
J. F. Eichelmann, Jr.
D. J. Mobbs
H. Reiquam
E. F. Smythe

El Paso NATURAL GAS COMPANY

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

March 10, 1982

Oscar Simpson III, Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, N. M. 87501

Re: El Paso Natural Gas Company
Jal No. 4 Plant
Discharge Plan

Dear Mr. Simpson:

In response to your letter of January 11, 1982 we wish to supply the following information in regard to your comments and requests:

(A) The level control valves in the make-up water lines to the subject towers have been repaired. The chemical treatment for the water is being changed from a chromate system to an organic zinc system. This compound is furnished by Continental Products of Texas and is referred to as ANTIPOL 640. Pertinent literature in regard to this material is attached. This change will be completed by March 15, 1982.

(B) The chromate chemicals formerly used for cooling tower treatment are being removed from the plant site and the storage area is being cleaned up. This problem will be corrected by March 15, 1982.

(C-1) Ponds 1, 2, and 3 have had new temporary berms constructed to prevent surface runoff into the ponds. Pond No. 2 has been emptied and is being dried up. Pond No. 3/3A had been emptied but it was necessary to reuse the pond for a short period of time while the classifier pumps were being repaired. It may be necessary to use this pond from time to time until a new contingency pond is designed, approved, and installed.

See Pictures 3-27-81

(C-2) It will be necessary to continue using Pond No. 1 for domestic sewage until approval for the sewage drain field is received from EID. It is our understanding that such approval should

be received in the near future; however, we have been advised that Mr. Randall Hicks of the EID will be involved in Environmental hearings until March 19, 1982 and it will be after this date before he can act upon the request. All material is on hand for the drain field and we are awaiting approval for the installation.

(C-3) Pond No. 2 has been emptied. Pond No. 1 will be emptied as soon as the domestic sewage drain field is installed. As stated earlier Pond No. 3 had been emptied but it was necessary to reuse the pond while the classifier pumps were being repaired. Suitable design alternates are being investigated and costs are being developed for an appropriate contingency pond. It is anticipated that this contingency pond can be completed by July 1, 1982.

Ponds 5, 6, 7, and 8 (depressions) have been bermed to prevent collection of runoff water. These areas are dry.

Valve packing leaks and steam trap leaks have been and are being repaired as necessary. In the absence of more specific details we consider that this problem has been corrected. Drainage systems for plant storage tanks and coolant systems are tied to the drain system to the existing classifier facility. We feel that we are in compliance with this request.

A tracer log has been run the full length of disposal Well SWD-214. This log was delivered to your Hobbs office on February 17, 1982. These logs will be run each year per OCD requirements.

If you have any questions, or if you need any additional information, please do not hesitate to contact me.

Sincerely,

EL PASO NATURAL GAS COMPANY

M E McEuen

M. E. McEuen
Division Superintendent

MEM:dc
Attachment

HYDROCHEM

CONTINENTAL PRODUCTS OF TEXAS

100 Industrial Avenue
(915) FEderal 7-4681

P. O. Box 3627
Odessa, Texas 79760

408 American Bank of Commerce Building
(915) FEderal 2-0928

TECHNICAL BULLETIN

ANTIPOL 640

ANTIPOL 640 is a specially compounded chemical designed to provide both corrosion protection and fouling control in aereated recirculating cooling water systems. This product contains no chromate or phosphate and can be used in systems where these materials present disposal problems or are otherwise objectionable.

ANTIPOL 640 is a cathodic inhibitor and functions by formation of a passivating film at the cathode on metal surfaces. System contamination from silt, mud, iron hydroxide and other debris are effectively dispersed for removal through blowdown.

ANTIPOL 640 is relatively non-toxic and will not present disposal problems in streams; however, it is not intended for potable water systems.

ANTIPOL 640 is a balanced blend of organic complexing and dispersing agents and polyvalent cathodic inhibitor which gives it both corrosion inhibiting and detergent properties.

Recirculating, open cooling water systems are normally treated at 50-100 ppm of ANTIPOL 640. Individual systems will require varying amounts of 640 depending on severity of corrosion and degree of fouling. It is recommended that pretreatment of any system be in the range of 200-300 ppm 640 for 24-48 hours to establish initial filming of metal surfaces.

ANTIPOL 640 solutions have a pH of 6.8 - 7 and the optimum pH of a treated system is in the range 7-8. However, varying system conditions may require a higher or lower range. Alkalinity control should be in a range normal for any other type of treated system for scale and wood deterioration control.

A water solution of 5-20% should be prepared for injection into the system, and in most cases should be injected continuously. Batch treatment is permissable in some systems where blowdown is not excessive and treatment control is not critical.

ANTIPOL 640 is supplied in a dry powder form, packaged in non-returnable fibre drums containing 300 lbs. net.

MATERIAL SAFETY DATA SHEET

U. S. DEPARTMENT OF LABOR "ESSENTIALLY SIMILAR" TO FORM LSB-OOS-4

SECTION I

MANUFACTURER'S NAME	Continental Products of Texas	EMERGENCY TELEPHONE NO.	(915) 337-4681
ADDRESS	Box 3627 - Odessa, Texas 79760		
CHEMICAL NAME AND SYNONYMS	Zinc Organic	TRADE NAME AND SYNONYMS	"Antipol-640"
CHEMICAL FAMILY	Metal Organic	FORMULA	Not Applicable

SECTIONS II HAZARDOUS INGREDIENTS

INGREDIENT	%	SPECIES	LD_{50} ORAL	LD_{50} DERMAL	LC_{50} CONCENTRATION	LC_{50} HOURS

POTENTIALLY TOXIC INGREDIENTS	%	TLV (UNITS)

SECTION III PHYSICAL DATA

BOILING POINT (°F.)	None	SPECIFIC GRAVITY (H_2O=1)	No
VAPOR PRESSURE (MM HG.)	None	PERCENT VOLATILE BY VOLUME (%)	No
VAPOR DENSITY (AIR = 1)	None	EVAPORATION RATE (_____ = 1)	No
SOLUBILITY IN WATER	100		
APPEARANCE AND ODOR	White Powder		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	None	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA	None			
SPECIAL FIRE FIGHTING PROCEDURES	None			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None			

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE None

EMERGENCY AND FIRST AID PROCEDURES None

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

None

WASTE DISPOSAL METHOD

Regular Waste

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (GENERAL)	OTHER

PROTECTIVE GLOVES No

EYE PROTECTION Safety Glasses

OTHER PROTECTIVE EQUIPMENT Dust Respirator

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING None

OTHER PRECAUTIONS None

DATE ISSUED.

Continental Products of Texas

J. D. CRAWFORD, VICE PRESIDENT

El Paso NATURAL GAS COMPANY

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

March 10, 1982

Oscar Simpson III, Water Resources Specialist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87501

RE: El Paso Natural Gas Company
Jal No. 4 Plant
Brine Storage Facilities

Dear Mr. Simpson:

In response to your letter of January 11, 1982 we wish to advise you that the brine pumps and transmission lines are being repaired. Various methods of installing drainage collections systems either inside the brine pump houses or outside around the building foundations are being evaluated.

The steel storage tank referred to in your letter as being located between Pond No. 9 and Pond No. 6 is a fresh water storage tank. If you are referring to the brine surge tank located between Pond No. 3/3A and Pond No. 8 we wish to advise that a work order to replace this tank is being requested. A brine collection system will be installed around the base of this tank when it is replaced.

We would also like to advise you that Pond No. 9 has been emptied and that bids have been received and are being evaluated to rebuild this pond to OCD specifications. We expect that all necessary work to correct deficiencies of the brine system will be completed by July 1, 1982.

If you have any questions in regard to the brine system please do not hesitate to contact me.

Sincerely yours,

M. E. McEuen
Division Superintendent

MEM/kgs

El Paso NATURAL GAS COMPANY

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

March 10, 1982

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P. O. Box 2088
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If you have any questions in regard to the brine system please do not hesitate to contact me.

Sincerely yours,

M. E. McEuen
Division Superintendent

MEM/kgs

HEALTH & ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 827-5271
Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

February 5, 1982

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Larry Anderson
El Paso Natural Gas
P.O. Box 1384
Jal, New Mexico 88252

Dear Mr. Anderson:

I have reviewed the addendum to the Jal #3 discharge plan received by the Environmental Improvement Division on January 27, 1982. This addendum suffers from the same deficiencies as the addendum to the Jal #4 discharge plan. These deficiencies were discussed in my letter to you dated February 2, 1982. Tests for determining the hydraulic conductivity of an aquifer are described in most hydrology textbooks. Your Environmental Affairs Department may be able to provide some expertise for the hydraulic conductivity test. Their preparation of the Jal #3 discharge plan (dated May 1981) was quite good and addressed most of the hydrologic questions typically asked of a discharger.

Please refer to my February 2 letter to you which addresses the drawbacks of the type of pump test performed at the Jal #3 and Jal #4 Plants.

If you have any questions, please feel free to contact me at the above address and telephone number.

Sincerely,

Randy Hicks

RANDALL T. HICKS
Water Resource Specialist

RTH:rr

cc: John E. Guinn

HEALTH & ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
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GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

February 2, 1982

Mr. Larry Anderson
El Paso Natural Gas
P.O. Box 1384
Jal, New Mexico 88252

Dear Mr. Anderson:

I have some serious reservations about the pump test methodology which was used to collect the data submitted in the addendum to your discharge plan dated January 18, 1982. These data showed that the Ogallala aquifer had a hydraulic conductivity of 1.6×10^{-2} m/sec.

The lithologic log of the pumped well (#9) does not show any confining layers and therefore I believe the aquifer is unconfined. I then used the data with the formula for drawdown in an unconfined aquifer described on the accompanying page.

Re-arranging the formula and solving for K (P) yeilds the following for the Jal well #9:

$$K = 23.8 \frac{\text{gal/min}}{\text{foot}^2} \quad \text{or } 1.6 \times 10^{-2} \text{ m/sec.}$$

This value for the hydraulic conductivity of the Ogallala is extremely large. The expected maximum value for the hydraulic conductivity of the Ogallala aquifer may be approximated from the following data (from Cronin, 1964 and the EPNG Jal #4 discharge plan):

$$\text{maximum velocity } (V_{Darcy}) = 12 \text{ inches/day}$$

$$\text{maximum hydraulic gradient } (dh/dl) = 12 \text{ feet/mile}$$

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$$K = -(V_{Darcy})\,(dl/dh)$$

$$K = \frac{440 \text{ ft}}{\text{day}} = 1.55 \times 10^{-3} \text{ m/sec.}$$

Freeze and Cherry (1979) on page 29 (enclosed) show that 1.55×10^{-3} m/s is a reasonable value for the hydraulic conductivity of clean sand and 1.6×10^{-2} m/s is a reasonable value for a sand and gravel aquifer. The lithologic logs supplied in the discharge plan addendum do not show any gravel in the subsurface. This leads me to suspect that the reported drawdown in the pumped well may not have been measured at equilibrium. A drawdown versus time plot of the pump test was not provided therefore there is no evidence to support your statement that the well drawdown had stabilized after 45 minutes of pumping.

The 0.2 foot drawdown reported for the observation well is also suspect. Using the maximum expected value for K, a 0.2 foot drawdown should be observed at less than 100 feet from the pumping well. This value for the cone of depression will significantly effect your calculated K value in the addendum. Verification of radius of the cone of depression can be obtained by inputting appropriate data into the Theis non-equilibrium equation. Your hydrologist who conducted the pump test should be familiar with the equation and the necessary input data.

In summary:

1. Your calculated K value for the Ogallala aquifer exceeds the maximum expected value by an order of magnitude.

2. The pump test data submitted in the addendum did not adequately demonstrate that the aquifer is capable of receiving 10,755 gallons of effluent per day without degradation of ground water quality above the standards of Section 3-103 (Water Quality Control Commission Regulations).

3. El Paso Natural Gas needs to demonstrate that the method of waste water treatment for the Jal #4 plant will meet the requirements of Section 3-109 of the Water Quality Control Commission Regulations.

4. A complete set of data should accompany any additional pump test results submitted to the EID.

If you have any questions please contact me at the above address and telephone number.

Sincerely,

Randy Hicks

RANDALL T. HICKS
Water Resource Specialist

RTH:rr

Bruce King
GOVERNOR

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
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DEPUTY SECRETARY

February 5, 1982

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El Paso Natural Gas
P.O. Box 1384
Jal, New Mexico 88252

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Sincerely,

Randy Hicks

RANDALL T. HICKS
Water Resource Specialist

RTH:rr

cc: John E. Guinn

EPNG SUBMITTAL

To EID

For Sewage

EL PASO NATURAL GAS COMPANY

JAL NO. 4 PLANT

ADDENDUM

Modification to the Sewage
System Discharge Plan

Robert A. Harrell, Jr.
Project Engineer

Larry E. Anderson, PE
Chief Division Process Engineer

January 18, 1982

LARRY E. ANDERSON
NEW MEXICO
6471
REGISTERED PROFESSIONAL ENGINEER

This addendum to the Jal No. 4 Plant Modification to the Domestic Sewage System Plan, September 18, 1981, describes the geological and hydraulic conditions in the Ogallala Aquifer in the vicinity of the Jal No. 4 Plant.

Enclosed in this addendum are copies of the well logs and completions, a summary of the method and conditions for the well drawdown test, calculations for the hydraulic conductivity, and calculations for the final concentration of nitrogen in the aquifer.

DIXON WATER SYSTEM COMPANY
2309 West Second Street
PHONE FE 7-8605 P. O. BOX 1746
ODESSA, TEXAS

VERTICAL TURBINES
PEERLESS HI-LIFTS
DOMESTIC SYSTEMS
CENTRIFUGALS
WELL TESTING

August 25, 1961

Water Well Log for El Paso Natural Gas Company, Jal #4 Plant, Water Well #11.

Drilled 150 ft. of 20" Hole.
Set 150 ft. of 16" OD Casing and cemented by Halliburton.
Drilled 2 ft. of 15-1/2" Hole (Necessary to get tools in hole for under reaming.
Under Reamed 16" OD Casing to 36" Hole from 152' to 245' (Total of 93 ft.)
Drilled 5 ft. into red bed.
Total depth of hole - 250 ft.
Set 10-3/4" Casing as follows:
7 ft. blank below shutter screen.
70 ft. Stainless Steel Shutter Screen.
175 ft. Blank on top of shutter screen.
252 ft. total 10-3/4" casing (2 ft. above ground.)

FORMATION:

From:	To:	
0'	15'	Surface Soil
15'	45'	Red Sand
45'	70'	White Lime
70'	90'	Red Sand Rock
90'	94'	Hard Sand Rock
94'	245'	Red Sand
245'	250'	Red Bed.

THE LAYNE-TEXAS COMPANY, Ltd.

HOUSTON — DALLAS

WELL LOG

ELEV. WELL No. 9

LOG OF WELL FOR: El Paso Natural Gas Company TEMPERATURE:

WELL LOCATED: Plant #4 - Jal, New Mexico COUNTY: Lea

JOB STARTED: DRILLING STARTED TEST HOLE COMPLETED:

WELL CONSTRUCTION COMPLETED: 4/22/55 PUMP INSTALLATION COMPLETED:

FORMATION LOG

Depth Strata	Each Stratum	Formation
2	2	surface sand
5	3	sand and caliche
10	5	sandy clay and caliche
30	20	red sand and caliche
35	5	fine red sand
42	7	caliche-hard sand rock-little white sand
51	9	white sandy caliche
61	10	fine red sand-caliche-red clay
87	26	white sand and caliche
92	5	hard brown sandrock and caliche
107	15	brown sand and caliche
114	7	red sand-caliche-hard sand-rock streaks
133	19	fine red sand-few sand rock breaks
144	11	hard red sand and caliche
163	19	fine red sand-sand rock and caliche
176	13	sand rock - fine red sand and caliche
183	7	brown sand (cut good)-little caliche
204	21	brown sand-lime-little black sand
233	29	fine brown sand-lime streaks-brown shale streaks
253	20	coarser brown sand-lime streaks
256	3	sand and red bed
262	6	red bed T.D.

MATERIAL SETTING

Depth of Setting	Length	Size and Kind of Material
155	155	18" O.D. casing
	155	lap of 12" in 18"
0	0	Top of 12-3/4" casing
170	170	12-3/4" O.D. blank pipe
250	80	12-3/4" screen
253	3	12-3/4" O.D. set nipple

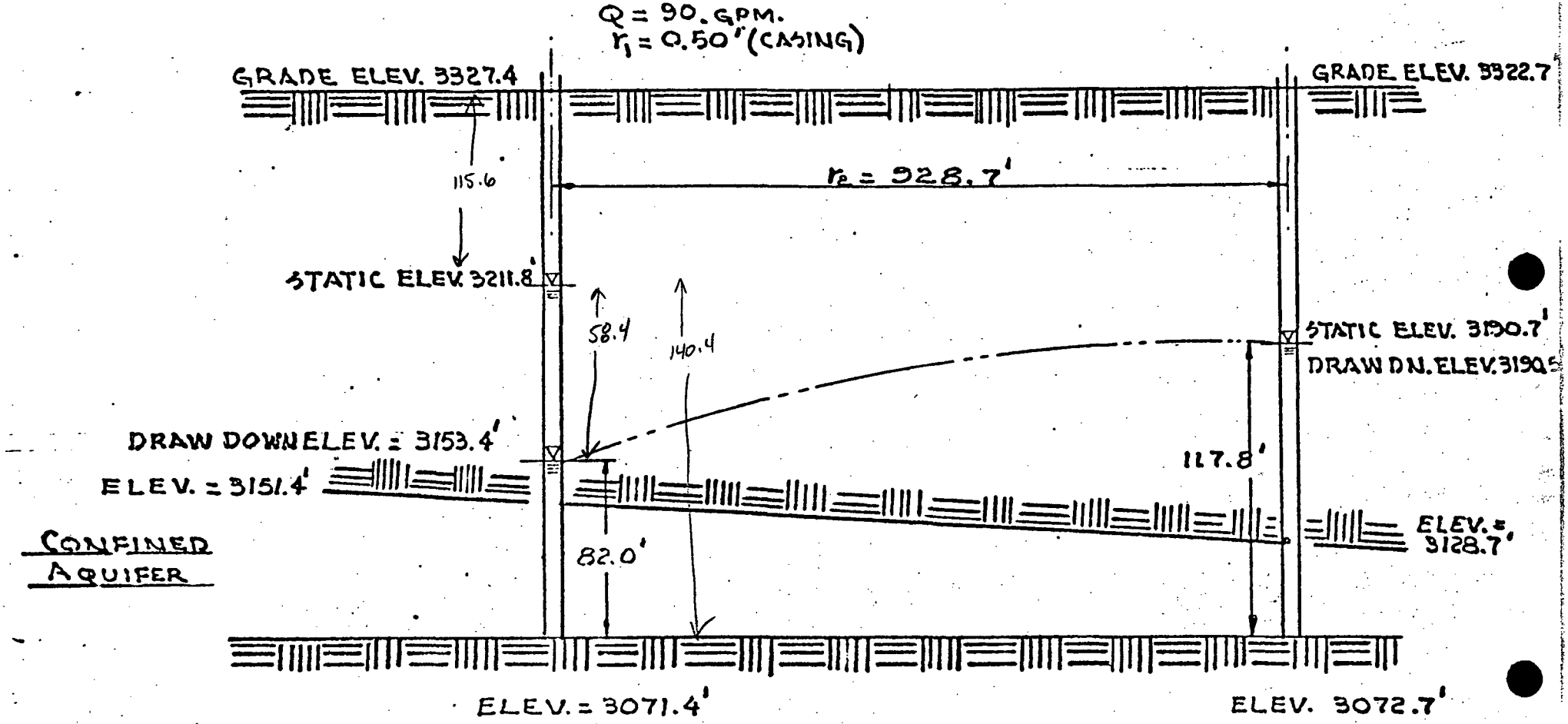
NOTE:

Screen is Layne stainless steel shutter screen - #7 gauge, #3 and 4 openings.

screen

WTR. WELL #9

WTR. WELL #1



$$K = \frac{528\ Q\ \log(r_2/r_1)}{M(h_2^2 - h_1^2)}$$

$K = 638\ GPM/FT^2$

$K = 0.142\ FT/SEC.$

$$K = \frac{90\ GPM\ (528)\ \log(928.7/0.5)}{(68\ FT.)(117.8FT - 82.0FT.)}$$

$K = 43.8 \times 10^{-3}\ M/SEC.$

PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. REC.		DATE
DRAWN	JAS	12-14-81
CHECKED	RAH	12-14-81
CHECKED		
PROJ. APP.		
DESIGN		
W.O.		

El Paso Natural Gas Company

JAL Nº 4 PLANT

DRAWDOWN TEST

SCALE: N/A | DWG. NO. J14-L-79 | REV.

The Calculation of the Final Concentration in the Ogallala Aquifer.

The concentration of nitrogen in the aquifer is given by the equation:

$$C_{final} = \frac{C_{effluent} \times Q_{effluent} + C_{aquifer} \times Q_{aquifer}}{Q_{effluent} + Q_{aquifer}}$$

Where:

C_{final} is the final concentration of the nitrogen.

$C_{effluent}$ is the concentration of the nitrogen in the septic tank effluent.

$C_{aquifer}$ is the original concentration of nitrogen in the aquifer.

$Q_{effluent}$ is the quantity of effluent per unit of time.

$Q_{aquifer}$ is the quantity of water passing through a given area per unit of time.

The flow of water is an aquifer is predicted by Darcy's Law. The area of concern is the dimension of the drainfield perpendicular to the ground water flow (P) multiplied by the top ten feet of the aquifer (t).

Applying Darcy's Law to find $Q_{aquifer}$:

$A = P(t)$

$= (327ft)\ (10\ ft)$

$A = 3270ft^2 \doteq 304m^2$

$k = 43.8 \times 10^{-3}\ m/s$

$\frac{dh}{dl} = 0.004\ \frac{m}{m}$

$$Q_{aquifer} = k \frac{dh}{dl} A$$

$$= (43.8 \times 10^{-3} m/s)\ (0.004 \frac{m}{m})\ (304\ m^2)$$

$$= 0.0533\ m^3/s$$

$$Q_{aquifer} = 4600\ m^3/day.$$

Applying the dilation equation to find C_{final}:

$$C_{aquifer} = 4mg/L$$

$$C_{effluent} = 60mg/L$$

$$Q_{aquifer} = 4600m^3/day$$

$$Q_{effluent} = 10{,}755\ gal/day = 40.7m^3/day$$

$$C_{final} = \frac{60mg/L\ (40.7^3/day) + 4mg/L\ (4600m^3/day}{40.7m^3/day + 4600\ m^3/day}$$

$$C_{final} = 4.5\ mg/L$$

The final concentration of nitrogen, 4.5mg/L, is less than the standard of 10 mg/L.

Well Drawdown Test.

On December 9, 1981, a water well drawdown test was run in the Jal No. 4 water well field. The test indicates a hydraulic conductivity or permeability, k, of 43.8 X 10^{-3} m/s.

The drawdown test was performed as follows. Two wells were selected which had not been pumped in at least two days. An M - Scope was lowered into each well, and the static level was recorded. Then the pump at the test well was turned on and allowed to pump for forty-five minutes. Thirty minutes is the time that the well log and the Water Supply Foreman indicate is needed for the test well drawdown to reach equilibrium the drawdown was measured.

The depths to the top and bottom of the aquifer were determined from the well logs on file in the Water Supply Office. All measurements were made from the sampling/inspection port at the base of the pump. Ground elevations and locations were determined from Field Engineering, survey records. The permeability was calculated using the U.S. Geological Survey formula for confined aquifers. The final answer was converted to metric units.

The test was performed with the Jal No. 4 Plant, well #9 as the test well and the Jal No. 4 Plant, well #11 as the observation well. All of the producing wells except Jal No. 4 wells #7, and #9 and #11 were pumping prior to starting the test.

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
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Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

February 2, 1982

Mr. Larry Anderson
El Paso Natural Gas
P.O. Box 1384
Jal, New Mexico 88252

Dear Mr. Anderson:

I have some serious reservations about the pump test methodology which was used to collect the data submitted in the addendum to your discharge plan dated January 18, 1982. These data showed that the Ogallala aquifer had a hydraulic conductivity of 1.6×10^{-2} m/sec.

The lithologic log of the pumped well (#9) does not show any confining layers and therefore I believe the aquifer is unconfined. I then used the data with the formula for drawdown in an unconfined aquifer described on the accompanying page.

Re-arranging the formula and solving for K (P) yeilds the following for the Jal well #9:

$$K = 23.8 \frac{\text{gal/min}}{\text{foot}^2} \quad \text{or } 1.6 \times 10^{-2} \text{ m/sec.}$$

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maximum velocity (V_{Darcy}) = 12 inches/day

maximum hydraulic gradient (dh/dl) = 12 feet/mile

The hydraulic conductivity is then calculated from Darcy's law:

$$K = -(V_{Darcy})\ (dl/dh)$$

$$K = \frac{440 \text{ ft}}{\text{day}} = 1.55 \times 10^{-3} \text{ m/sec.}$$

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The 0.2 foot drawdown reported for the observation well is also suspect. Using the maximum expected value for K, a 0.2 foot drawdown should be observed at less than 100 feet from the pumping well. This value for the cone of depression will significantly effect your calculated K value in the addendum. Verification of radius of the cone of depression can be obtained by inputting appropriate data into the Theis non-equilibrium equation. Your hydrologist who conducted the pump test should be familiar with the equation and the necessary input data.

In summary:

1. Your calculated K value for the Ogallala aquifer exceeds the maximum expected value by an order of magnitude.

2. The pump test data submitted in the addendum did not adequately demonstrate that the aquifer is capable of receiving 10,755 gallons of effluent per day without degradation of ground water quality above the standards of Section 3-103 (Water Quality Control Commission Regulations).

3. El Paso Natural Gas needs to demonstrate that the method of waste water treatment for the Jal #4 plant will meet the requirements of Section 3-109 of the Water Quality Control Commission Regulations.

4. A complete set of data should accompany any additional pump test results submitted to the EID.

If you have any questions please contact me at the above address and telephone number.

Sincerely,

RANDALL T. HICKS
Water Resource Specialist

RTH:rr

HEALTH & ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 827-5271
Thomas E. Baca, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

February 5, 1982

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. E. F. Smythe
The El Paso Natural Gas Company
P.O. Box 1492
El Paso, Texas 79978

Dear Mr. Smythe:

The discharge plan (DP-196) for the Washington Ranch Storage Project located at the SW¼ of Section 34, T. 25 S., R. 24 E., is hereby approved. The approved discharge plan consists of the plan dated September 23, 1981 and the material dated January 28, 1982 submitted as a supplement to the discharge plan.

The discharge plan was submitted pursuant to Section 3-106 of the N.M. Water Quality Control Commission Regulations. It is approved pursuant to Section 3-109. Please note subsections 3-109.E. and 3-109.F., which provide for possible future amendment of the plan. Please be advised that the approval of this plan does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

There will be no monitoring or reporting requirements.

Pursuant to subsection 3-109.G.4., this plan approval is for a period of five years. This approval will expire February 2, 1987, and you should submit an application for new approval in ample time before that date.

Sincerely,

THOMAS E. BACA
Director

TEB/RH/rr

cc: John E. Guinn
Thomas A. Burt
Oscar Simpson

HEALTH & ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87503
(505) 827-5271
Thomas E. Baca, M.P.H., Director

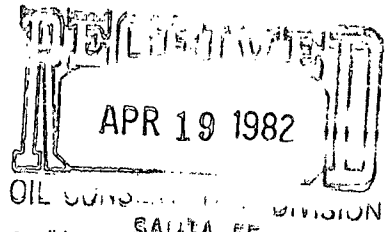
Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

CERTIFIED MAIL--RETURN RECEIPT REQUESTED

April 14, 1982



Mr. Larry Anderson
El Paso Natural Gas
P. O. Box 1384
Jal, New Mexico 88252

SUBJECT: Discharge Plans for El Paso Natural Gas Plants: Jal #4, Jal #5, Eunice and Monument

Dear Mr. Anderson:

I have reviewed your addendum to the Jal #4 discharge plan (dated February 26, 1982). The presentation of data was clear and well organized

In your analysis of the pump test on Jal Well #1 you did not address the fact that the data from the test plotted on two separate lines. This type of response to pumping can be due to hydraulic boundaries or well inefficiency and/or casing storage. The steeply sloping portion of the pump test data (which you used in your analysis) is probably a response to casing storage and is not representative of the aquifer properties. My analysis of the pump test and other data (using standard theoretical flow and dilution equations) does show that the nitrogen standard of 3-103 of the WQCC Regulations will not be exceeded as a result of your sewage discharge.

However, an inspection of the existing and proposed sewage facilities at Jal #4 Plant by Mr. David Boyer and Mr. Joel Hubbell of the EID Water Pollution Control Bureau on April 1, 1982 brought up some additional questions which require consideration. These questions, discussed below, may also apply to all the El Paso Natural Gas discharge plans referenced in the heading of this letter.

During the inspection, Mr. Boyer commented upon the approximately 10 foot rise in the static water level of Well #1 at the Jal #4 plant between the time of drilling in 1953 and February's pump test. This rise in the static water level is documented in the driller's log and pump test data submitted in the Jal #4 addendum. Mr. Harrell of your staff, Mr. Oscar Simpson of the New Mexico Oil Conservation Division and the EID staff suggest the same hypothesis: the rise in the static water level may be the result of the recharge to the aquifer from percolation ponds at the plant site. If contaminated fluid from this recharge is present under the leach field, one of two processes could occur:

1. The discharge from the leach field (10,755 gallons per day) may cause the existing contamination (which may include nitrates) to migrate to a place of withdrawal of ground water for present or foreseeable future use, or

2. The discharge may effectively dilute the contamination and the standards of 3-103 that are or may be exceeded now will not be exceeded at a place of withdrawal of water for present or reasonable foreseeable future use.

Since contamination of ground water at the site appears to have occurred, determination of effect of the sewage discharge or water quality cannot be made without knowledge of the extent of the suspected ground water contamination (quality and quantity). Your theoretical calculations previously made do not take this apparent contamination into account. In order to receive approval of your proposed discharge to the subsurface, you must demonstrate that the discharge will not result in either concentrations in excess of the standards of Section 3-103 or the presence of any toxic pollutant at any place of withdrawal of water for present or reasonably foreseeable future use (3-109.C). If contamination of ground water is confirmed beneath the leach field, and you demonstrate, through theoretical calculations, that the Regulations will not be violated, a monitoring and reporting schedule and contingency plan should your discharge plan fail (as proposed by El Paso and reviewed by the EID) will be required by the Director as part of your demonstration (3-107).

During the inspection of the site, Mr. Boyer also observed many disturbed surface features that may indicate the presence of buried or covered over wastes or discharges at the plant site. Because the plant has been in operation for many years, the Division recommends core samples of the Jal #4 leach field site to insure that no wastes lie beneath the proposed discharge site. The locations and depth for the core samples should be agreed upon by both the EID and El Paso before coring.

Upon examination of the existing sewage pond, an oily sheen was noted on the surface and a pipe (other than the one discharging sewage effluent) went into the pond. Before approval of the discharge plan, the EID will require a committment by El Paso that no effluents other than domestic sewage (commonly knows as "graywater" and "blackwater") will be discharged into the system.

Throughout the discharge plan review El Paso has demonstrated a willingness to comply with the Regulations and operate their plants in an environmentally sound manner. We appreciate your cooperation and are confident that these new questions can be resolved. Our evaluation of your discharge plan will continue to be coordinated with Oscar Simpson of the OCD. We look forward to a reply by May 14, 1982.

If you have any questions please contact me at the above address and telephone number.

Sincerely,

Randall Hicks
Water Resource Specialist
Ground Water Section

RH/jba

cc: Oscar Simpson, OCD
John Guinn, Roswell EID
Brown Edwards, Hobbs EID
John F. Eichelmann, Jr., The El Paso Company

HEALTH & ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
P.O. Box 968, Santa Fe, New Mexico 87504-0968
(505) 827-5271
Russell F. Rhoades, M.P.H., Director

Bruce King
GOVERNOR

George S. Goldstein, Ph.D.
SECRETARY

Larry J. Gordon, M.S., M.P.H.
DEPUTY SECRETARY

June 16, 1982

Mr. D.N. Bigbie
Administrative Assistant to the
Division Superintendent
El Paso Natural Gas Company
Two Petroleum Center, Suite 200
North "A" at Wadley
Midland, Texas 79701

RE: Domestic Sewage Discharge Plans for El Paso Natural Gas Company's Eunice (DP-221), Jal #3 (DP-198), Jal #4 (DP-199), and Monument (DP-226) Plants.

Dear Mr. Bigbie:

The New Mexico Environmental Improvement Division (EID) has received your letter of May 26, 1982, concerning the above referenced discharge plans. In accordance with your request in that letter, these discharge plans are withdrawn from EID review and consideration for approval. We understand that these domestic effluents will be commingled with other plant discharges and therefore be transferred the Oil Conservation Division (OCD) regulatory jurisdiction.

Thank you for the cooperation of you and your staff during the EID review of these discharge plans. If we can be of any further assistance or if you need further information, please do not hesitate to ask.

Sincerely,

David G. Boyer
Ground Water Hydrologist
Water Pollution Control Bureau

DGB:jba

cc: John Guinn, District IV
Brown Edwards, EID Hobbs
R.L. Stamets, OCD, Santa Fe
John Eichelmann, El Paso Natural Gas Co., Santa Fe

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

January 15, 1982

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

P.O. BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

Mr. O. R. Dakan
El Paso Natural Gas Company
P. O. Box 1384
Jal, New Mexico 88252

Re: Jal No. 4 Brine Pond Construction

Dear Mr. Dakan:

I see no problem in going to a 3 to 1 slope on interior walls and to 2 to 1 on exterior walls, as your letter of January 13, 1982, requested.

As discussed while you were here, I do think the leak detector system should be under the entire lining, which would include the sides.

When you have the laterals installed, we will inspect them.

If any other information is needed, please let us know.

Yours very truly,

OIL CONSERVATION DIVISION

OK OAS 1-18-82

Jerry Sexton
Supervisor, District 1

JS/mc

cc: Mr. Oscar Simpson
OCD, Santa Fe

El Paso NATURAL GAS COMPANY

P. O. BOX 1384
JAL, NEW MEXICO 88252

PHONE: 505-395-2551

January 13, 1982

State Of New Mexico
Energy And Minerals Department
Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

Attention: Mr. Jerry Sexton, Supervisor, District 1

RE: JAL NO. 4 BRINE POND CONSTRUCTION

Dear Mr. Sexton:

This letter and attached print are in response to our telephone conversation, January 6, 1982, regarding the brine holding pits at our Jal No. 4 Plant.

We request your approval to leave the berm slopes at 3:1 on the interior walls and 2:1 on the exterior walls when we reconstruct this pit. The attached drawing No. 5004.13-2 indicates the existing slopes.

It is felt that a more suitable base can be provided for the Fiberglass liner, as well as reducing the total job cost.

All other specifications as shown on drawing No. 5004.13-2 will be unchanged.

Please notify me if any other information is required.

Sincerely,

O.R. Dakan

O.R. Dakan
Senior Project Engineer

OD/bk
cc: file

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

January 11, 1982

El Paso Natural Gas Company
Two Petroleum Center /Suite 200
North "A" at Wodley
Midland, Texas 79701

ATTENTION: Mr. M. E. McEwen

RE: Discharge Plan for
Jal No. 4 Plant

Dear Sir:

Attached to this cover letter are the comments and requests the Oil Conservation Division requires of El Paso Natural Gas Company to obtain a Discharge Plan for Jal Plant No. 4.

We would appreciate a prompt reply to our comments and requests in order to finalize Jal's Discharge Plan.

If you have any questions on this matter, please do not hesitate to contact me at (505) 827-2534.

Sincerely,

Oscar A. Simpson III

Oscar A. Simpson, III
Water Resource Specialist

OAS/dp

Enc.

cc: Forrest Sprester
P.O. Box 1492
El Paso, Texas 79978

DISCHARGE PLAN FOR JAL # 4 PLANT

Pursuant to the review of El Paso Natural Gas Company's Discharge Plan for Jal Plant #4 and two on-site inspections of the plant; the Oil Conservation Division requests that the following conditions must be corrected in order to obtain a Discharge Plan.

(a) the cooling towers in their present condition allow water to escape their drainage basins and during windy weather water is blown away from the towers and on to the ground.

(b) toxic chemicals used to treat water in the cooling towers are being improperly handled and stored and as a result spillage and leakage are common place.

If the present system of treatment for the cooling tower waters is to be used in the future, then the cooling towers will have to be repaired and modified to prevent the above conditions from occurring; unless a suitable non-polluting treatment system is substituted.

(c) the berms are in poor condition on ponds, 1, 2, and 3 and are not functioning. Portions of the berms are missing or have breaks in them enabling surface runoff to drain into the ponds and prevent the ponds from drying up.

Due to El Paso's lack of concern or interest in trying to dry out ponds 1, 2, and 3, in a timely manner, and weather conditions have greatly decreased evaporation in the ponds; El Paso is requested to:

1) construct berms where as needed to prevent surface runoff from draining into ponds one through eight and their adjacent areas within one month from this date and re-direct drainage patterns away from the ponds.

Fed 11

2) If pond No. 1 is still receiving liquid waste from septic tanks, appropriate measures shall be taken within one month from this date to collect, store, and dispose of such waste to enable pond No. 1 to dry

Verbal OAS Extension Toll Station of Sewage Disposal By EID is WORKED OUT & OKed

3) Completely drain ponds 1, 2, and 3 within two months of this date through one of the following methods:

A) disposal by injection

B) truck the wastewater from ponds to a disposal area, or

C) disposal by other methods suitable to the OCD

Mar 11, 1982

Inspection of Ponds 5, 6, 7, and 8 and adjacent areas revealed there was significant accumulations of sludge.

El Paso is therefore requested to take appropriate actions to enable the sludge to be dried, removed, and stored with the other sludge from ponds 1, 2, and 3. Pond No. 3 shall be drained, dried and the sludge removed and stored with the rest of the pond sludge as per El Paso's "Closure Plan".

Unlined Contingency ponds 3 and 3A will not be allowed due to the chemistry of the plant wastewater. The Discharge Plan does not have an adequate contingency plan to dispose of wastewater in the event the injection well or its appurtenances fail to function. With the present injection system at Jal Plant No. 4, if a breakdown occurs wastewater would have to be diverted into Pond No. 3. As a result, Pond No. 3 would never be allowed to dry and the proposed contingency ponds 3 and 3A would function as storage ponds.

The contingency plan for Jal Plant No. 4 will have to be revised and under no circumstances will wastewater be allowed to be disposed of in unlined pits or onto the ground surface.

The Plant in general does not have an adequate collection system to collect all the associated wastewater, lubricants, and coolants associated with the plant system. Numerous discharges onto the ground surface were occurring during past inspections and were the result of leaking valves, pump packings, blowdown outlets, and mechanical failures of the plumbing systems of the various components of the plant. Most of the leakage was due to lack of maintenance..

Due to the above conditions, El Paso is requested to install adequate collection and drainage systems to prevent such discharge in the future. Drainage systems shall also be provided for associated plant storage tanks and closed coolant systems which might bleed off or be drained. El Paso will be given four months from this date to complete the drainage system and maintenance required to bring the plant in conformance.

May 11, 1982

In response, No. 9 of the additional material supplied to you, there is a misunderstanding on El Paso's part as to the status and the frequency the tracer-temperature survey will be run on SWD-214. According to El Paso's Natural Gas letter of August 26, 1981, from Mr. James B. Kelly to Mr. Jerry Sexton, OCD District Supervisor of Hobbs, a tracer or an inspection log will be run each year the full length of the well and copies of the log sent to the Hobbs District Office. The OCD requests that the procedures of August 26, 1981 letter from Mr. James B. Kelly, be followed.

As of this date, the Hobbs District Office has not received a copy of the first tracer or inspection log run on SWD-214. If a copy cannot be located and sent to the Hobbs Office, then another tracer or inspection log will have to be run.

ron tracer log — will set up for from each year — run full length

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

January 11, 1982

El Paso Natural Gas Company
Two Petroleum Center/Suite 200
North "A" at Wodley
Midland, Texas 79701

ATTENTION: Mr. M. E. McEwen

RE: Brine Storage Facilities
at Jal No. 4 Plant

Dear Sir:

In addition to the Oil Conservation Division requests as per the October 28, 1981 letter addressed to you, the OCD requests the following:

1) The OCD requests that the pump houses that are apart of the bringe storage facility have a drainage collection system installed in them and all the associated pumps and transmission lines should be repaired and maintained to prevent spillage of brine water on to the ground surface.

2) The steel storage tank between pond No. 9 and pond No. 6 is leaking and is in need of repair. Also a collection system for the tank will be required to prevent any overflow from the tank.

The Oil Conservation Division requests the repairs and collection systems be completed by April 28, 1982. If you have any questions on this matter, please do not hesitate to contact me at (505) 827-2534.

Sincerely,

Oscar A. Simpson III

Oscar A. Simpson, III
Water Resource Specialist

OAS/dp

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

October 28, 1981

El Paso Natural Gas Company
Two Petroleum Center / Suite 200
North "A" at Wadley
Midland, Texas 79701

ATTENTION: Mr. M. E. McEwen

RE: Brine Storage Ponds
at JAL No. 4 Plant

Mr. McEwen:

Pursuant to your letter of July 6, 1981, requesting the two brine storage ponds used in conjunction with your underground LPG storage facility at Jal #4, be excluded from Jal Plant # 4 Discharge Plan, the Oil Conservation Division hereby grants your request.

The submittal on September 27, 1981 of construction details (Drawing No. 500. 413-12), for the above brine storage ponds at Jal # 4 have been reviewed. El Paso must incorporate the OCD modifications and supply the additional information as per the drawings and accompanying letter.

The time frame you suggested for relining the brine ponds is too long of a period to permit on-going pollution. An inspection of the ponds in June of this year by OCD personnel indicates they are in bad condition and are leaking. Under Order No. R-3221, the ponds should have been relined to approved OCD specifications years ago.

Therefore, the Oil Conservation Division requests the ponds be relined within six months from the date of this letter.

Sincerely,

Due April 28, 1981

Oscar A. Simpson

Oscar A. Simpson,
Water Resource Specialist

OAS/dp

October 28, 1981

El Paso Natural Gas Company
Two Petroleum Center / Suite 200
North "A" at Wadley
Midland, Texas 79701

ATTENTION: Mr. M. E. McEwen

RE: Brine Storage Ponds
at JAL No. 4 Plant

Mr. McEwen:

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Therefore, the Oil Conservation Division requests the ponds be relined within six months from the date of this letter.

Sincerely,

Oscar A. Simpson,
Water Resource Specialist

OAS/dp

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

October 19, 1981

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Attention: Forrest R. Sprester

Re: Jal No. 4 Brine Pond
Construction

Dear Forrest:

In response to El Paso Natural Gas Company's letter of August 27, 1981, and accompanying submittal of Jal No. 4 Brine Pond construction details, the Oil Conservation Division requests that a few modifications be made.

1. The 10 mill liner on the bottom of the ponds shall be extended to all sides of the pond slopes such that the 10 mill and 30 mill liner shall overlap a distance of 3'. (See revised Drawing No. 5004.13-2).

2. State what size of perforations will be used, how many perforations per lineal foot, and the open area of the perforations in square inches per lineal foot. Also, what schedules of PVC will be used and the type of joint Connections.

3. All Construction requirements as set forth in the OCD "Specifications for the Design and Construction of Lined Evaporation Pits" shall be used where applicable.

Thank you.

Sincerely,

Oscar Simpson

OSCAR SIMPSON
Water Resource Specialist

OS/jc
Encls.

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

September 8, 1981

Oscar Simpson III, Water Resources Specialist
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

RE: El Paso Natural Gas Company
Jal No. 4 Treating Plant
Wastewater Discharge Plan

Dear Mr. Simpson:

In response to your letter of May 8, 1981 requesting analysis of groundwater and wastewater at El Paso's Jal No. 4 Plant, the analyses were accomplished and provided to you as Table 4 in our letter dated August 7, 1981 with one exception, Cyanide. The Cyanide determination were completed by our Southern Division Laboratory on September 2, 1981. The results reported were as follows:

Sample Location	Cyanide Content mg/L
Groundwater, Depth 105 feet	0.008
Groundwater, Depth 175 feet	0.013
Wastewater Discharge to disposal well	0.005

Where taken
As Specified

This fulfills the last remaining open item pertaining to the referenced Discharge Plan. Should you have any questions pertaining to the above please call.

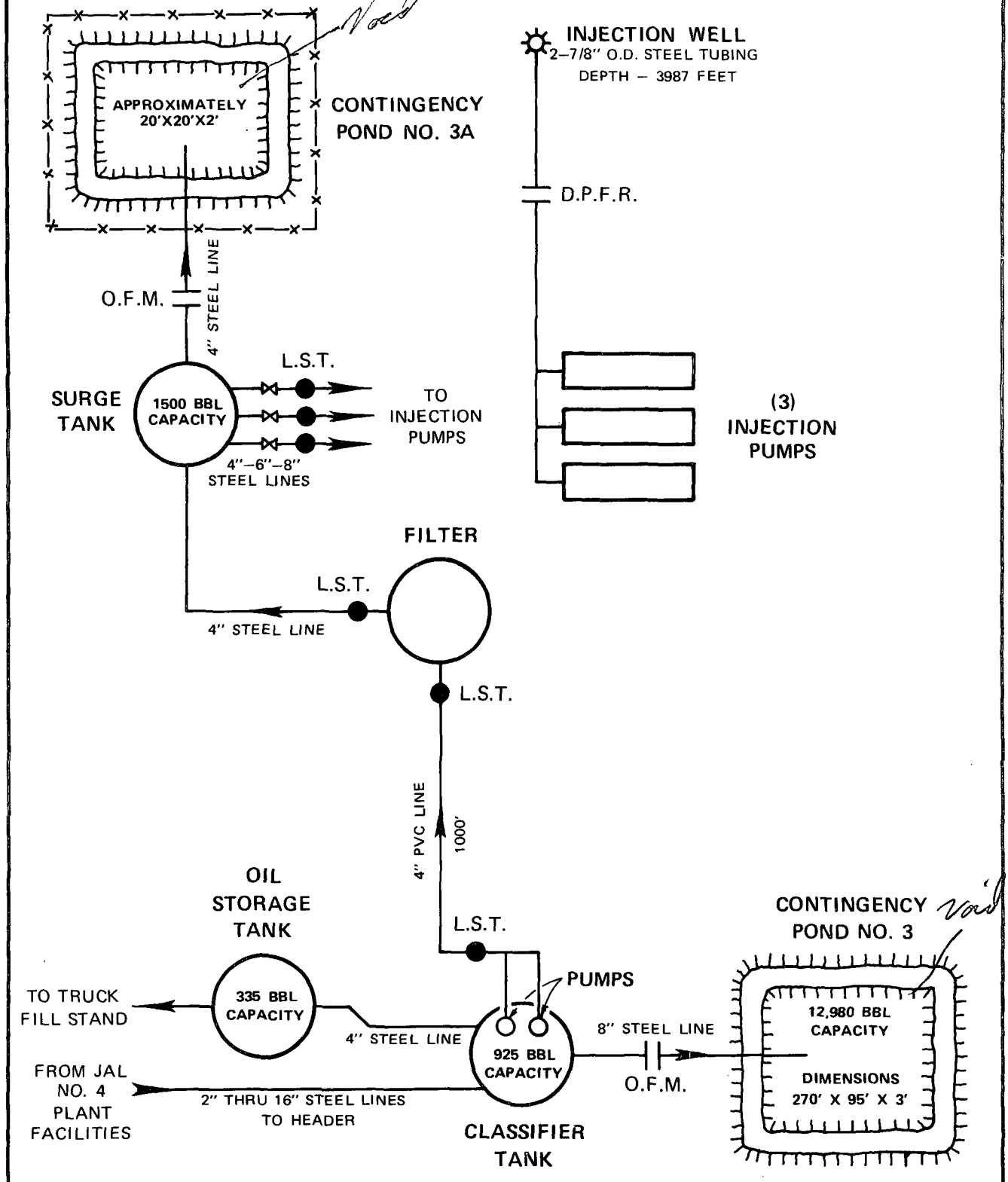
Forrest R. Sprester

Forrest R. Sprester, P.E.
Environmental Engineer
Environmental Affairs

sg

cc: M. E. McEuen

Void not applicable



LEGEND

O.F.M. – OVERFLOW METER (ON ORDER)

L.S.T. – LIQIUD SAMPLE TAP

D.P.F.R. – DIFFERENTAL PRESSURE FLOW RECORDER

El Paso NATURAL GAS COMPANY

FIGURE 2

JAL NO. 4 PLANT

SAMPLE TAP AND MEASUREMENT SCHEMATIC OF DISPOSAL WATER

W.W. NO. 16
W.W. NO. 12
4" PVC 2500'
W.W. NO. 15
4" TRANSITE 830'
W.W. NO. 11
1600' 4" TRANSITE
W.W. NO. 14
W.W. NO. 10
W.W. NO. 9
6" STEEL 1978'
4" STEEL 1250'
6" TRANSITE 1748'
W.W. NO. 3
2100' 6" TRANSITE
2200' 3" TRANSITE
W.W. NO. 7
1187' 6" STEEL
W.W. NO. 8
7609' 8" TRANSITE
TO CONOCO DISPOSAL (4" PLASTIC)
PUMP
DISPOSAL WELL AREA
5,2,2
CONOCO STORAGE TANK
"B" COMPRESSOR
BOILER PLANT
TO PLANT DISTRIBUTION SYSTEM
"C" COMPRESSOR
BACKWASH WASTEWATER
TREATING PLANT
SULPHUR PLANT
RETURN WATER OVERFLOW
WASTEWATER CLASSIFIER AREA
WATER STORAGE
WATER TREATMENT
"A" COMPRESSOR
"A" GASOLINE PLANT
COOLING TOWER
2
Sol samp
HOUSING AREA
OFFICE
4" COOLING TOWER BLOW-DOWN (STEEL)
COOLING TOWER
PRODUCT STORAGE
"B" GASOLINE PLANT

NOTE

IRRIGATION SYSTEMS: LAWN SPRINKLERS AND GARDEN WATERING

El Paso NATURAL GAS COMPANY

FIGURE 1

JAL NO. 4 PLANT

WATER AND WASTEWATER FLOW SCHEMATIC

NEW MEXICO OIL CONSERVATION DIVISION

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

NAME OF OPERATOR El Paso						ADDRESS		
REPORT OF	FIRE	BREAK	SPILL	LEAK	BLOWOUT	OTHER*		
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE	GASO PLNT	OIL RFY	OTHER*	
NAME OF FACILITY Jal #4 disp.								
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION)						SEC.	TWP.	RGE.	COUNTY
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK									
DATE AND HOUR OF OCCURENCE						DATE AND HOUR OF DISCOVERY			
WAS IMMEDIATE NOTICE GIVEN?	YES	NO	NOT REQUIRED			IF YES, TO WHOM Evelyn Downs			
BY WHOM Ray Hester						DATE AND HOUR √ 11-23-81 - 10 AM			
TYPE OF FLUID LOST plant effluent						QUANTITY OF LOSS 10,230 gal	VOLUME RECOVERED -	
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO	QUANTITY " to contingency pond.					

IF YES, DESCRIBE FULLY**

DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**

sump malfunction at 11:a m 11-20-81
back on at 4:30 PM

RECEIVED
APR 05 1982
OIL CONSERVATION DIVISION
SANTA FE

DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**

DESCRIPTION OF AREA	FARMING	GRAZING	URBAN	OTHER*			
SURFACE CONDITIONS	SANDY	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW

DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED TITLE DATE

*SPECIFY **ATTACH ADDITIONAL SHEETS IF NECESSARY

Will submit written report when pond is dry.

243.57 bbls

Emergency Use of Pit

116

El Paso NATURAL GAS COMPANY

600 BUILDING OF THE SOUTHWEST
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

September 1, 1981

Mr. Jerry Sexton
Supervisor, District I
Oil Conservation Division
P. O. Box 1980
Hobbs, N.M. 88240

RE: Use of Contingency Pond at Jal #4 Plant

At 11:30 A.M. on Sunday, August 30, the contingency pond on the Jal #4 SWD system was placed in service. The piping on the discharge of the classifier pump failed. The pipe was repaired, and the disposal system was placed back in service at 12 Noon, August 31.

The average discharge rate is approximately 70 gallons per minute. The total discharge estimate is, therefore, 2350 BBL. The waste water in the contingency pond was pumped back into the classifier when the disposal system was placed in operation.

Yours truly,

Larry E. Anderson

Larry E. Anderson
Chief Division Process Engineer

LEA/km

cc: Dutch J. Mobbs
Harold C. Franklin
W. H. Tuttle
Addressee (2)
File (2)

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

August 27, 1981

Oscar A. Simpson III
Hydrogeologist
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Oscar:

As per our conversation on August 24, regarding the Jal No. 4 Brine Ponds, I am enclosing a copy of El Paso's Drawing No. 500.413-2 showing the proposed brine pond reconstruction which we previously discussed and for which your gave verbal approval of the method.

The drawing is for your review and approval.

Sincerely,

Forrest R. Sprester, P. E.
Environmental Engineer

sg

RECEIVED
SEP 0 3 1981
OIL CONSERVATION DIVISION
SANTA FE

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: 915-543-2600

August 26, 1981

Mr. Jerry Sexton
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

Re: Shell State SWD #13-L 32-23-37

Dear Mr. Sexton:

This letter is in answer to your request to confirm that El Paso Natural Gas Company will run a tracer or an inspection log on the above subject well as soon as possible and will set up a schedule to run a log each year hereafter. Copies of these logs will be sent to your office.

There was a misunderstanding with the clerk who completes the monthly disposal reports, Form C-120A. These reports were made out, but they were not sent to your office. This has now been corrected and they will be sent to you. The injection pressures have been high on these reports. However, on July 21, 1981 this well was re-acidized and pressure tests conducted that indicate future injection pressures should fall within the maximum pressure allowed.

Please notify me if there is anything else you would require.

Very truly yours,

James B. Kelly
Senior Engineer
Water Resources
Operations Department

rh

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

August 20, 1981

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

GIS-5415465

Mr. James B. Kelly
Operating Department
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

SUBJECT: Shell State SWD #13-L 32-23-37

Dear Mr. Kelly:

Since the above well was completed in a manner other than the one outlined in SWD-214, it is my understanding from our recent telephone conversation concerning the above disposal well that El Paso will run a tracer or an inspection log each year to verify that the water is going all the way down to the perforated interval at 3866 --2882 feet before leaving the wellbore.

We would appreciate your giving us a letter confirming the above. Also, you will need to furnish this office with a copy of each log or tracer run on the above well.

According to a letter dated March 12, 1981, from a Mr. John W. McCarthy with your firm, the above well was put into service on March 7, 1981, and as of this date we have received no monthly disposal reports, Form C-120A. After disposal is commenced, this form should be submitted monthly whether water is disposed into the well or not.

Very truly yours,

OIL CONSERVATION DIVISION

Jerry Sexton
Supervisor, District I

ed

cc: File

T. J. Simpson

El Paso NATURAL GAS COMPANY

P. O. BOX 1384
JAL, NEW MEXICO 88252

PHONE: 505-395-2551

August 13, 1981

Mr. Jerry Sexton
Supervisor, District I
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

RE: USE OF CONTINGENCY POND AT JAL NO. 3 PLANT

Mr. Sexton:

This letter is to confirm the verbal telephone report made to your office on August 7th by Rex Hester.

At approximately 9:00 p.m. August 6th a malfunction of the classifier pump controls necessitated the use of the contingency pond at Jal No. 3 Plant.

A repair crew was dispatched to the plant and the malfunction was corrected and the disposal system put in service at 2:30 p.m. August 7th at which time the use of the contingency was discontinued.

During the period of time the contingency pond was in use, approximately 31 gallons per minute was going to the contingency pond for a total of 32,550 gallons or 775 BBL.

The liquids that were diverted to the contingency ponds are being pumped back into the disposal system.

The quality of the discharge is as set forth in the discharge plan filed for Jal No. 3 and in qualifying remarks requested by the Santa Fe office.

Yours truly,
EL PASO NATURAL GAS CO.

Rex Hester

Rex Hester
Chief Division Project Engineer

RH/ls

cc: Dutch J. Mobbs
H. C. Franklin
W. Harbin
Addressee - 2
File - 2

Use Pit

El Paso NATURAL GAS COMPANY

P. O. BOX 1384
JAL, NEW MEXICO 88252

PHONE: 505-395-2551

August 12, 1981

Mr. Jerry Sexton
Supervisor, District I
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

RE: USE OF CONTINGENCY POND AT JAL NO. 4 PLANT

Mr. Sexton:

This letter is to verify the verbal telephone report made to your office on July 31, by Larry E. Anderson and followed by several telephone reports by Rex Hester.

At about 9:00 p.m., July 30th, a failure of the two classifier pumps necessitated the use of the contingency pond. Parts were flown in to repair the pumps and discontinuance of discharge into the contingency pond occurred at 7:00 p.m., August 4th.

The average discharge rate is approximately 70 gallons per minute; the total discharge to the contingency pond was 11,600 BBL. This water is being pumped into the disposal system. The quality of the discharge is as set forth in the discharge plan filed for Jal No. 4 and in qualifying remarks requested by the Santa Fe office.

(13,000 bbls) not

Yours truly,
EL PASO NATURAL GAS CO.

Rex Hester
Chief Division Project Engineer

RH/ls

cc: Dutch J. Mobbs
H. C. Franklin
W. H. Tuttle
Addressee - 2
File - 2

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: 915-543-2600

August 7, 1981

Oscar Simpson III, Water Resources Specialist
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

RE: El Paso Natural Gas Company
Jal No. 4 Treating Plant
Wastewater Discharge Plan

Dear Mr. Simpson:

Pursuant to your letter of May 8, 1981, El Paso hereby submits the additional information requested regarding the above referenced discharge plan.

These responses, together with the Discharge Plan submitted on April 2, 1981 and the request for exemption of the plant brine storage ponds [letter dated July 6, 1981 from M. E. McEuen (El Paso) to Richard Stamets (NMOCD)], address all the discharge and process waters at the Jal No. 4 plant.

El Paso trusts that compliance with the rules and regulations of the New Mexico Water Quality Control Commission has been demonstrated, and that the Discharge Plan, with attachments and amendments is acceptable to the New Mexico Oil Conservation Division.

Yours truly,

E. F. Smythe

E. F. Smythe, P. E.
Chief - Permits & Support
Environmental Affairs

sg
attach.
cc: M. E. McEuen w/attach.

Responses to New Mexico Oil Conservation Division's Request for Additional Information on the Jal No. 4 Plant Discharge Plan[1/] Lea County, New Mexico

Response No. 1: A schematic diagram of the water and wastewater flow for El Paso's Jal No. 4 Plant is shown in Figure 1.

Response No. 1a. The water well field consists of 10 active wells located approximately two miles west of the plant site. The average depth of the wells is 250 feet with the pumping level averaging 195 feet.[2/] The collection system is made of 4 and 6 inch transite and steel pipe with two - 6 inch lines in parallel transporting the water to the plant.

Three steel storage tanks are located at the plant site: 10,000 bbl. at ground level, 2000 bbl. at ground level, and an elevated 595 bbl. tank. The distribution system from the storage tanks consists of steel pipes that vary from 2 to 6 inches in diameter.

Response No. 1.b. The Housing Area water supply is stored in the 595 bbl. elevated tank prior to distribution.

Response No. 1.c. The plant area obtains water from the two ground level storage tanks. Raw water from storage is treated in a zeolite process prior to distribution to plant equipment requiring such waters.

Discharged wastewaters flow from the various processes in steel drain pipes to a collection header then to a steel wastewater classifier tank, for oil and water separation. The separated wastewater is pumped through a 4-inch PVC line to an anthracite filter then into a surge tank. The wastewater from the surge tank is discharged into the disposal well (SWD-214) by means of high pressure plunger type pumps.

The separated oil in the classifier is pumped through a 4-inch steel line to an oil storage tank. The oil is removed from the storage tank to be sold to a reclaimer/refiner as volumes warrant.

1/ Original Discharge Plan Submitted April 2, 1981.

2/ This represents a change to the discharge plan, Section VII Water Use and Disposal, page 23.

Response No. 1.d. Wastewater from the cooling tower basin flows through a steel pipe to a steel collection header then to a galvanized steel storage tank. The stored wastewater is then pumped to Conoco through a 4-inch PVC line. An overflow return line is connected to the classifier in the event Conoco can not use the cooling tower wastewater.

Response No. 1.e. The irrigation system consists of lawn sprinklers at individual houses and gardens located in the housing area. The water is derived from the wells described in Response No. 1.a.

Response No. 2: Additional information on each component of the classifier is shown on Figure 5, Revision A, to the submitted Discharge Plan and Figure 2, both attached.

Response No. 3: Sludge from the classifier tank will be removed as necessary and dewatered in steel containers. The dewatered sludge will be stored on site to permit stabilization to further reduce the sludge. The degraded sludge will be sampled and analyzed for ignitability and toxicity. After a negative determination for ignitability and toxicity the sludge will be disposed of in a sanitary landfill certified by the New Mexico Environmental Improvement Division.

Sludge in the two waste disposal pits to be closed are addressed in the attached closure plan (Response No. 7).

Response No. 4: The past and present method of domestic wastewater treatment consists of a septic tank with the effluent being pumped to pond No. 1 (see Figure 5) for disposal by evaporation. El Paso is presently designing an absorption field for domestic wastewater disposal in order to close Pond No. 1.

Domestic wastewaters at oil and gas facilities are regulated by the New Mexico Environmental Improvement Division, if the industrial wastes and domestic wastes are separate discharges. Therefore, a Notice of Intent to Discharge will be filed with the New Mexico Environmental Improvement Division following preliminary design and prior to construction of the new system. The Domestic wastewater will not be chlorinated nor disposed of in the disposal well as previously stated in the discharge plan.1/

1/ Represents a change to the discharge plan, Section VIII Discharge Plan, page 25.

Response No. 5: The estimated daily production of wastewater from the Jal No. 4 Plant is shown in Table 1.

TABLE 1

Estimated Daily Production of Wastewater
Jal No. 4 Plant
El Paso Natural Gas Company

Source	Quantity Barrels[1] per day
Industrial wastewater from classfier	1645
Domestic wastewater	256
Cooling tower blowdown wastewater given to Conoco	427
TOTAL DISCHARGE	2328 = 97,776 gal/day

1/ 42 gallons per barrel.

The total daily discharge averages 68 gallons per minute. Data obtained from the totalizing meter maintained by Conoco indicates an average of 427 barrels of wastewater per day for the first half of 1981 as shown in Table 2.

TABLE 2

Cooling Tower Blowdown Wastewater
Given to Conoco Jan-June 1981

Month	Quantity Average Barrels per day
January	573
February	459
March	377
April	425
May	325
June	400
Average	427

Response No. 6 El Paso's disposal well (SWD-214) was placed in operation on March 7, 1981. The average daily flow rate has been approximately 1550 barrels. The monthly injection of wastewater is shown in Table 3. Actual yearly values are not yet known.

TABLE 3

Monthly Injection of Wastewater
into SWD-214

Month	Barrels
March	48,371 - 1560/day
April	50,400
May	42,076
June	48,369

Response No. 7: El Paso has evaluated the pond sludges and prepared a closure plan for the two ponds to be abandoned. The closure plan is attached.

Response No. 8: The quality of the Ogallala formation water in the general area is brackish as defined by Clark et al (1977).[1/] That is, brackish water ranges from 1000 to 35,000 mg/L of dissolved salts. The Discharge Plan contains a summary of water quality data produced by the New Mexico State Engineer and reproduced in Figure 7 of the Plan. From this source the groundwater was determined to range up to 3000 micromhos per centimeter in the general area. According to Standard Methods 14th Edition, specific conductance can be used to check total dissolved solids (TDS). In this case, the TDS or total salts would range up to 2100 mg/L.

A groundwater sample was collected from El Paso Well No. 1 located within the plant boundaries (See Figure 5, Revision A) and analyzed for the constitutents listed in NMWQCC Regulation Section 3-103. The results of the analysis is shown in Table 4.

Response No. 9: El Paso will conduct a tracer-temperature survey when requested by NMOCD for detection of leakage on the injection system. SWD-214 was completed without a pressure monitor system because of the lack of clearance for a tubing packer for the 2-7/8 inch tubing inside the 4-1/2 inch casing.

Response No. 10: Copies of the cement bond log of SWD-214 and the job log performed by Halliburton Services are attached.

[1/] Clark, J. W., W. Viessman, Jr., M. J. Hammer, Water Supply and Pollution Control, 3rd Edition, Harper & Row, Publishers, New York, N.Y., 1977.

Response No. 11: Figure 2 shows the location, design and methods available for sampling and for measuring wastewater flows into the disposal system.

There are six locations within the disposal system which may be used to collect wastewater samples. These are located at the classifier pump, discharge header on the upstream and downstream end of the filter, and three at the surge tank outlets.

Measurement of wastewater flow to the injection well will be accomplished using the differential pressure flow recorder at the injection well. During unplanned shutdown of the disposal well, the flow into the contingency pond will be measured by totalizing meters to be installed at the classifier and surge tank. NO

delete

El Paso will use the unlined contingency pond 3 and 3A for emergency purposes only. However, if a planned discharge is to occur the following will be adhered to:

void

1. Permission will be obtained from Hobbs District Office on a planned discharge to the contingency pond,

2. The quantity, quality, and duration of the discharge into the contingency pond will be reported on each occurrence by El Paso to the Hobbs Office, and

3. The contingency pond will not be allowed to be used as an overflow pond.

Response No. 12: The following will be submitted to the New Mexico Oil Conservation Division Hobbs Office on an annual basis:

A. monthly production logs of wastewater,

B. annual inspections and tests of the mechanical and meter components of the disposal system, and

C. the date and duration of any failure of the injection system.

Response No. 13: An analysis of the wastewater collected from the surge tank for those constituents listed in Section 3-103 (A, B, and C) of the Water Quality Control Commission Regulations is shown in Table 4.

TABLE 4

Analysis of Jal No. 4 Plant

Groundwater and Wastewater

Constitutent	Groundwater Depth 105 Feet	Groundwater Depth 173 Feet	Wastewater Discharge to Disposal Well
	Results in Milligrams per Liter		
.1 Arsenic (As)	0.014	0.016	0.022
1.0 Barium (Ba)	0.40	0.30	0.05
.01 Cadmium (Cd)	0.002	0.03	* 0.4
.05 Chromium (Cr)	0.040	0.058	* 2.1
.2 Cyanide (CN)	1/ .008	1/ .013	1/ .005
1.6 Fluoride (F)	0.78	0.56	* 2.36
.05 Lead (Pb)	0.05	0.04	* <0.1
.002 Total Mercury (Hg)	<0.0005	<0.0005	<0.0005
10.0 Nitrate (NO_3 as N)	4.15	4.70	0.0
.05 Selenium (Se)	<0.005	<0.005	0.008
.05 Silver (Ag)	<0.01	0.01	<0.05
250 Chloride (Cl)	96	96	* 274
1.0 Copper (Cu)	0.12	<0.05	<0.05
1.0 Iron (Fe)	49.5	16.2	0.17
.2 Manganese (MN)	0.50	0.40	<0.005
.005 Phenols	<0.05	<0.05	* 0.14
500 Sulfate (SO_4)	1.20	1.15	140
1000 Total Dissolved Solids (TDS)	767	854	* 1045
10 Zinc (Zn)	9.8	3.4	0.01
6-9 pH	10.8	7.1	7.3
5 Aluminum (Al)	<0.3	0.9	<0.3
.75 Boron (B)	0.34	0.32	0.38
.05 Cobalt (Co)	<0.05	<0.05	<0.05
1.0 Molybdenum (Mo)	<0.01	<0.01	<0.01
.2 Nickel (Ni)	<0.5	<0.5	<0.5

1/ Cyanide analysis will be accomplished upon receipt of chemicals. The estimated completion date is August 31, 1981.

El Paso NATURAL GAS COMPANY

TWO PETROLEUM CENTER / SUITE 200
NORTH LAT AT WADLEY
MIDLAND, TEXAS 79701
PHONE 915-684-5701

July 6, 1981

Mr. Richard Stamets
New Mexico Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87501

Project: El Paso Natural Gas Company
Jal No. 4 Natural Gas Processing Plant

Subject: Waste Water Discharge Plans
Brine Storage Ponds

Dear Mr. Stamets:

Pursuant to a conversation between you and Mr. John Eichelmann on June 17, 1981, El Paso respectfully requests a variance from the detailed chemical and hydrogeological demonstrations of a discharge plan for the brine storage facilities at the Jal No. 4 Plant. This request is based on the fact that the brine storage facilities contain a concentrated brine process water used in conjunction with underground LPG storage and withdrawal. The brine is used to displace LPG in underground salt strata or is displaced by the same and stored for later displacement use. The concentrated brine is not disposed of, only stored, and does not result from the production of oil and gas. There is no economic incentive to discharging such process water.

Using the New Mexico Oil Conservation Commission "Specifications for the Design and Construction of Lined Evaporation Pits" as a guideline, El Paso does plan to reline the ponds and will place a monitoring system consisting of slotted pipe on 20 foot centers draining to a sump.

Because of budget constraints identified in our meeting with your Department on March 19, 1981, El Paso plans to budget the relining in 1982 with completion by December, 1982.

This request for a variance applies only to the brine storage facilities and not to any other facilities for which a discharge plan has previously been submitted to your office.

El Paso is assembling the additional information requested in the OCD letter of May 8, 1981 (Oscar Simpson to El Paso). Hopefully, the relationship of the brine storage facilities to the overall discharge plan for Jal No. 4 can be simplified via this mechanism.

Yours very truly,

M E McEuen

M. E. McEuen
Division Superintendent

SG:dkh

cc: Oscar Simpson (NMOCD)
E. F. Smythe

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

June 8, 1981

El Paso Natural Gas Company
Environmental Affairs
P. O. Box 1492
El Paso, Texas 79978

Re: Discharge Plan for Jal #4 Plant

Gentlemen:

In response to your letter of May 19, 1981, asking for additional time to supply information requested as per the Oil Conservation Division letter of May 8, 1981, an extension of time is hereby extended from June 23, 1981, to August 10, 1981, for Jal No. 4 Discharge Plan.

In response to the telephone conversation with Forest Sprester on June 8, 1981, an oversight or misunderstanding arose concerning the storage of brine water at Jal No. 4 Plant which was produced in conjunction with oil and gas. Mr. Sprester was under the impression that the storage of said brine water was not to be included in the discharge plan because it wasn't related to the Plant. It is the position of the Oil Conservation Division that any effluent or brine water storage shall be included in the discharge plan whether on the plant property or in the near vicinity of the Plant. Also the brine storage ponds will have to meet specifications as set forth by the Oil Conservation Division inspected and permitted.

If there are any questions on this matter, please do not hesitate to call me at 505-827-2534.

Sincerely,

OSCAR A. SIMPSON III
Water Resource Specialist

OS/og

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: 915-543-2600

May 19, 1981

Mr. Oscar Simpson, III
Water Resource Specialist
New Mexico Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Project: El Paso Natural Gas Company
Jal No. 4 Natural Gas Processing Plant

Subject: Waste Water Discharge Plan Supplemental Information

Dear Mr. Simpson:

During a recent telephone conversation between yourself and our Mr. Forrest Sprester, it was agreed to allow El Paso 90 days in which to accumulate and submit the supplemental information requested in your letter of May 8, 1981.

In keeping with the agreement, may we consider the due date for this information to be August 8, 1981?

Very truly yours,

E. F. Smythe

E. F. Smythe, P.E.
Chief, Permits
Environmental Affairs Department

EFS:gb

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

May 8, 1981

El Paso Natural Gas Company
Two Petroleum Center - Suite 200
North "A" at Wadley
Midland, Texas 79702

Attention: M. E. McEven

Re: Discharge Plan for Jal No. 4 Plant

Gentlemen:

Pursuant to the request by Forest Sprester of El Paso Natural Gas Company, as per the telephone conversation of May 7, 1981, to grant a 90 day extension of time for Jal No. 4 Plant Discharge Plan, the extension of time is hereby granted.

The extension of time was granted on the basis that El Paso Natural Gas Company needs additional time to supply information requested as per the Oil Conservation Division letter of May 8, 1981. The extension of time for Jal No. 4 Discharge Plan is hereby extended from March 23, 1981 to June 23, 1981.

If you have any questions regarding this matter, please call me or Joe Ramey (Division Director) at 505-827-2534.

Sincerely,

OSCAR SIMPSON III
Water Resource Specialist

OS/og

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

May 8, 1981

El Paso Natural Gas Company
Two Petroleum Center/Suite 200
North "A" Wadley
Midland, Texas 79701

Attention: M. E. McEven

cc: Frank Chavez
Environmental Affairs
PO Box 1492 79978
El Paso Tex

Re: Discharge Plan for El Paso Natural Gas Company Jal No. 4 Plant, Lea County, New Mexico

Gentlemen:

We have received your Discharge Plan for Jal No. 4 Plant on April 8, 1981. In reviewing your discharge plan we find that additional information is needed in order to evaluate the plan.

The additional information needed is as follows:

1. Submit a complete schematic diagram with accompanying text illustrating the flow of water and wastewater from the point or points of collection to the point or points of discharge. The schematic diagram and text should include:

   A. the water field

   B. the Housing Area

   C. the plant area (illustrate and name each part of the plant using water or emitting wastewater.

   D. the collection and storage system for receiving cooling tower blowdown to be sold to Conoco

   E. irrigation systems (sources of water)

2. Submit additional information on each component of the typical block flow diagram (figure 8) such as dimensions, capacity, material constructed of, location on figure 5, and plumbing and valve arrangement between each component.

3. Specify what specific disposal methods will be used for the solids from the classifier and for the sludge and associated waste from the evaporation ponds.

4. Submit an overall detailed outline which includes:

   a. The present procedures and methods used ~~to~~ FOR disposing of sewage and the disposal methods to be used until chlorination can take place.

   b. The estimated dates for budgeting, installation, and completion of the chlorination equipment to treat sewage.

   c. Estimated date treated sewage will begin to be dumped into the classifier for injection.

5. Submit estimated daily production of wastewater coming from the plant, sewage from the housing and plant area, cooling tower blowdown to be sold to Conoco, and any other sources.

6. Submit past records of the daily and yearly totals of wastewater and or saltwater injected into SWD 214 well.

7. Submit time table for draining, drying out, removing sludge and waste, and backfilling of the evaporation ponds.

8. Submit data to back up the statement, "The water quality of the Ogallala in the Plant area is brackish", made on page 19, third paragraph from the top, of the Discharge Plan. (Data should include a chemical water analysis of elements listed in Section 3-103 A,B, and C of the Water Quality Control Commission Regulations.

9. Submit a detailed outline of inspection and testing procedures that will be utilized on a regular basis for detection of leakage on the injection system.

10. Submit a cement bond log of the SWD well Shell State No. 13 (32-T23S-R17E) NMPM, Lea County, New Mexico, and the injection rate tests done on the Grayburg.

11. Submit a diagram showing the location and design of site(s) and method(s) to be available for sampling and for measurement or calculation of flow of discharge.

To further clarify the use of the unlined contingency pond for emergency purposes, we would expect the discharge permit to provide that:

1. Permission would be obtained from Hobbs district office prior to discharge into the contingency pond.

2. The quantity, quality, and duration of the discharge into the contingency pond will be considered on each occurrence.

3. The contingency pond would not be allowed to be used as an overflow pond, and would only be used in cases of emergency due to failure of the injection system.

12. Submit a system for recording and reporting to Oil Conservation Division on a semi or annual basis the following:

    a. monthly production of wastewater

    b. inspection and testing intervals and results of

    c. failures of injection system. (date and duration of)

13. Submit a complete chemical analyses of the combined wastewater which will include those elements as listed in Section 3-103 (A,B, and C) of the Water Quality Control Commission Regulations.

If you have any questions on this matter, please do not hesitate to ask.

Sincerely,

OSCAR SIMPSON III
Water Resource Specialist

OS/og

El Paso NATURAL GAS COMPANY

TWO PETROLEUM CENTER / SUITE 200
NORTH "A" AT WADLEY
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

April 2, 1981

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: El Paso Natural Gas Company
Jal No. 4 Treating Plant
Waste Water Discharge Plan

Dear Mr. Ramey:

Pursuant to your letter of August 27, 1980, El Paso hereby submits the requested discharge plan for the above referenced facility.

I would like to take this opportunity to express appreciation for the reasonableness of your responses to our request for extension of the original due date and for your hospitality during the meeting held in your office March 19, 1981.

Pursuant to that meeting, El Paso fully expected to be able to submit the referenced discharge plan by March 30, 1981. However, unavoidable delays in printing the rather extensive document have caused a few additional days delay in submitting it. El Paso's Environmental Affairs Department contacted your Agency on March 30, 1981 and received verbal approval to submit two copies of the plan when it is ultimately printed. You asked that a written acknowledgement of that approval be submitted with the plan. We trust that this letter of transmittal will satisfy that request.

Very truly yours,

EL PASO NATURAL GAS COMPANY

M. E. McEuen
Division Superintendent

MEM:dc

CC: E. F. Smythe

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

December 23, 1980

Mr. E. F. Smythe, P.E.
Chief, Permits & Inventories
Environmental Affairs Department
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Re: Time Extension for Jal
No. 4 Waste Water
Discharge Plan

Dear Mr. Smythe:

We have received your letter of December 15, 1980, concerning your request for an extension of 90 days.

The information El Paso submitted shows good cause why the Oil Conservation Division should grant a time extension. The due date is hereby extended to March 23, 1981.

Please let us know if you have any problems with this arrangement.

Yours very truly,

JOE D. RAMEY
Director

JDR/TP/fd

cc: Larry Anderson, El Paso Natural Gas Co., Box 1384, Jal
Oil Conservation Division - Hobbs

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978

PHONE: 915-543-2600

December 15, 1980

Mr. Thomas Parkhill
New Mexico Oil Conservation Division (NMOCD)
P.O. Box 2088
Santa Fe, NM 87501

Subject: El Paso Natural Gas Company
Jal No. 4 Plant Waste Water Discharge Plan

Dear Mr. Parkhill:

Mr. Larry Anderson with our Field Operations in Jal advises that through a misunderstanding of regulatory jurisdiction regarding the sewage disposal pond at the Jal No. 4 Plant, he will not have the necessary data available to submit a discharge plan on the December 27, 1980 due date.

Originally it was understood, through discussions with your Hobbs office, that jurisdiction over the sewage pond belonged to the New Mexico Environmental Improvement Division (NMEID). Discussions with the NMEID confirmed the understanding and they advised that the pond was satisfactory as is and did not require a discharge pond.

However, recent conversations with the NMOCD Santa Fe Office revealed that the pond did indeed come under the jurisdiction of the NMOCD and must be included in the plant discharge plan.

Inasmuch as no field data has been gathered on this pond, may we have a 90 day extension of the due date in order to accumulate data for its evaluation and inclusion in the plant discharge plan.

Very truly yours,

E. F. Smythe, P.E.
Chief, Permits & Inventories
Environmental Affairs Department

EFS:gb

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

December 10, 1980

Mr. E. F. Smythe, P.E.
Chief, Permits & Inventories
Environmental Affairs
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Re: Sewage Water at Jal
No. 4 Plant

Dear Mr. Smythe:

Mr. Larry Anderson called us to inquire about the necessity of including sewage water in the discharge plan required for the Jal No. 4 Gas Plant.

Pond No. 2 is unlined and is receiving sewage water at the rate of more than 2000 gallons per day. The affluent has a chloride content which is higher than allowed by Water Quality Control Commission Regulations.

The Oil Conservation Division does require that any sewage water ponds on gas plant property be included in a discharge plan. This part of the plan would be approved in concurrence with the Environmental Improvement Division.

If you have any questions, please contact me at the above address or call me at 827-2534.

Yours very truly,

THOMAS A. PARKHILL
Hydrogeologist

TAP/fd

cc: Larry Anderson, El Paso Natural Gas Company, Jal
Oil Conservation Division - Hobbs

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ENERGY AND MINERALS DEPARTMENT
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August 27, 1980

Mr. E. F. Smythe, P.E.
Chief, Permits & Inventories
Environmental Affairs
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Re: Request for Discharge Plans

Dear Mr. Smythe:

Under provisions of the regulations of the Water Quality Control Commission you are hereby notified that the filing of discharge plans for El Paso's Jal No. 4 Plant (31 and 32-T24S-R37E) and Monument Gas Treating Plant (1-T20S-R36E) is required. Discharge plans are defined in Section 1-101.1 of the regulations and a copy of the regulations is enclosed for your convenience.

These plans should cover all discharge of effluent at the plant sites or adjacent to the plant sites. Section 3-106A. of the regulations requires submittal of the discharge plans within 120 days of receipt of this notice unless an extension of this period is sought and approved.

The discharge plans should be prepared in accordance with Part 3 of the Regulations.

If there are any questions on this matter, please do not hesitate to call me or Thomas Parkhill at 827-3260. Mr. Parkhill has been assigned responsibility for review of all discharge plans.

Yours very truly,

JOE D. RAMEY
Director

JDR/TP/fd

cc: Oil Conservation Division - Hobbs
El Paso Natural Gas Co., Box 1384, Jal, N. Mex. 88252
El Paso Natural Gas Co., Drawer C, Monument, N. Mex. 88265

JAL NO. 4

POND NUMBER	DIMENSIONS	DEPTH	LINING
1	See Drawing	5'	NONE
2	70' x 95'	8'	NONE
3	110' x 265'	3'	NONE
4	150' x 220'	Variable 0'to10'	GULFSEAL
5	150' x 220'	Variable 0'to10'	GULFSEAL
6	See Drawing	2'	NONE
7	See Drawing	2'	NONE
8	230' x 325'	Variable 0'to10'	GULFSEAL
9	Approximately 50' Diameter	1'	NONE
10	170' x 170'	1'	NONE
11	95' x 415'	1'	NONE

Total volume for pits 1, 2, 3, 6, 7, 9, 10 & 11:

48.2 million gallons per year

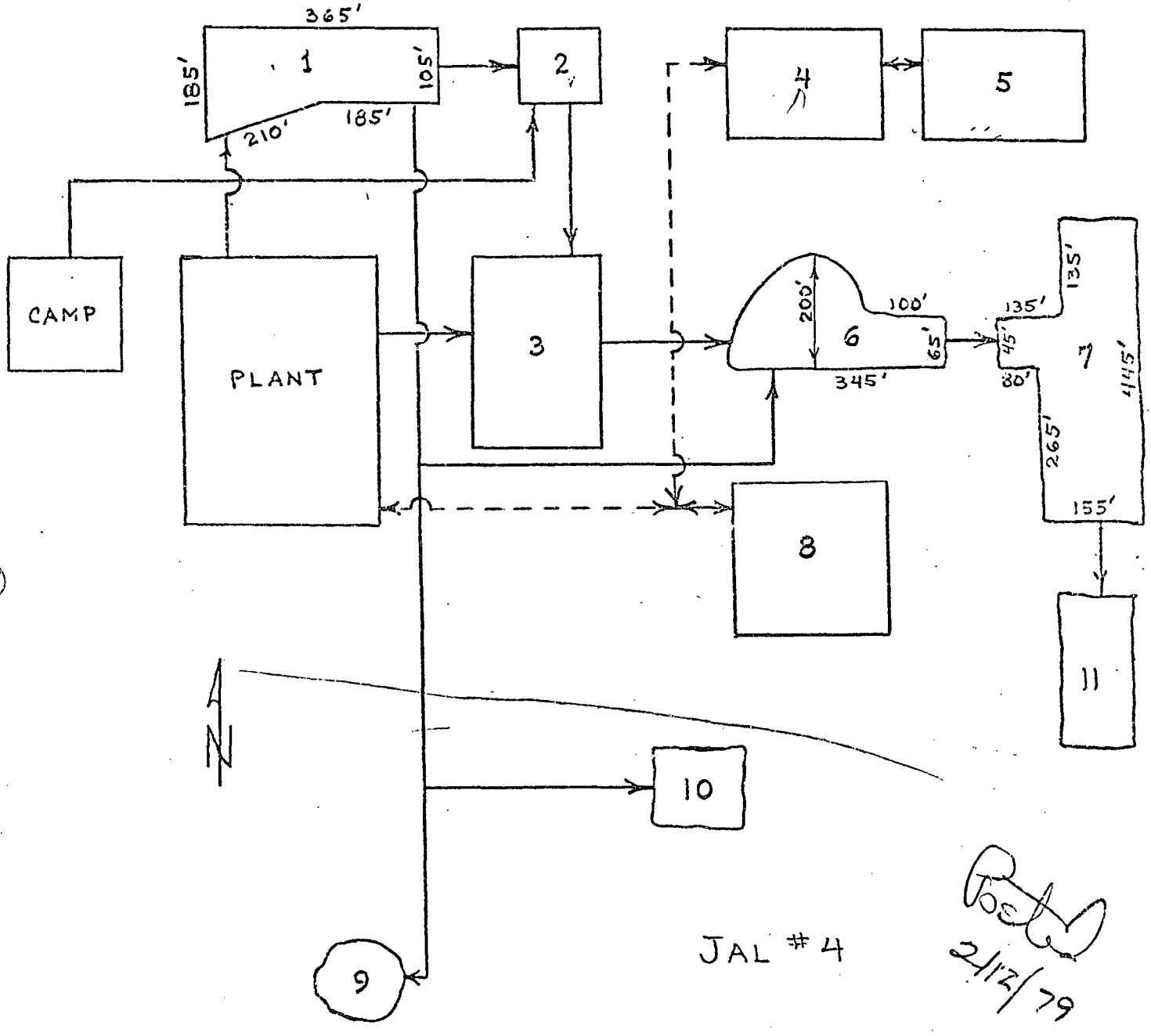
Volume to Conoco Waterflood:

23.7 million gallons per year

NOTE: Ponds 4, 5, and 8 are brine holding ponds. The brine is continually pumped between the ponds and butane/propane storage wells. No estimate of annual volume can be given.

Posted 2/12/79

El Paso



SE/4, SE/4, Sec. 31; S/2, SW/4, Sec. 32, T-23-S, R-37-E and SW/4 NW/4 and W/2 SW/4, Sec. 5, T-24-S, R-37-E, Lea Co., N. M.

Form 15-96 (Rev. 12-62)

EL PASO NATURAL GAS COMPANY
WATER ANALYSIS

Report date 1-5-79

le Location Jal #4

Sample date

Sample source →			Pond #1, #9, & #10	Pond #3	Pond #6 & #7	Pond #4 & #5, #8
CATIONS	Calcium (Ca)	as ppm $CaCO_3$	170	28	80	2,200
	Magnesium (Mg)	as ppm $CaCO_3$	90	2	360	280
	Sodium (Na)	as ppm $CaCO_3$	2,074	1,797	2,233	124,614
TOTAL CATIONS		as ppm $CaCO_3$	2,334	1,827	2,673	127,094
ANIONS	Bicarbonate (HCO_3)	as ppm $CaCO_3$	112	0	0	180
	Carbonate (CO_3)	as ppm $CaCO_3$	184	1,040	1,244	0
	Hydroxide (OH)	as ppm $CaCO_3$	0	720	1,292	0
	Sulfate (SO_4)	as ppm $CaCO_3$	208	37	97	1,914
	Chloride (Cl)	as ppm $CaCO_3$	1,830	30	40	125,000
TOTAL ANIONS		as ppm $CaCO_3$	2,334	1,827	2,673	127,094
TOTAL HARDNESS		as ppm $CaCO_3$	260	30	440	2,480
ALINITY		as ppm $CaCO_3$				
	Phenolphthalein		92	1,240	1,914	0
	Total		296	1,760	2,536	180
IRON ppm Fe			.35	1.02	.50	.10
SILICA ppm Si			33.5	-	-	16.5
TURBIDITY			36	50	12	6
TOTAL DISSOLVED SOLIDS (Mmhos)			4,300	6,000	10,000	14,000
CAUSTICITY ppm (OH) as $CaCO_3$						
pH			9.1	11.9	12.0	8.0
SULFITE (SO_3) ppm						
PHOSPHATES (PO_4) ppm						
	Poly					
	Ortho					
CHROMATE as ppm			.550	.250	.340	.001

s By Ellen Martin

cc: Charlie Mathis

Remarks:

Form 15-66 (Rev. 12-62)

EL PASO NATURAL GAS COMPANY
WATER ANALYSIS

Report date 1-5-79

Sample Location Jal #4 Sample date

			Sample source →	Pond #2 Sewage			
CATIONS	Calcium (Ca)	as ppm $CaCO_3$		124			
	Magnesium (Mg)	as ppm $CaCO_3$		76			
	Sodium (Na)	as ppm $CaCO_3$		631			
TOTAL CATIONS		as ppm $CaCO_3$		831			
ANIONS	Bicarbonate (HCO_3)	as ppm $CaCO_3$		304			
	Carbonate (CO_3)	as ppm $CaCO_3$		0			
	Hydroxide (OH)	as ppm $CaCO_3$		0			
	Sulfate (SO_4)	as ppm $CaCO_3$		97			
	Chloride (Cl) -	as ppm $CaCO_3$		430			
TOTAL ANIONS		as ppm $CaCO_3$		831			
TOTAL HARDNESS		as ppm $CaCO_3$		200			
ALINITY		as ppm $CaCO_3$					
	Phenolphthalein			0			
	Total			304			
IRON ppm Fe				.79			
SILICA ppm Si				19.5			
TURBIDITY				68			
TOTAL DISSOLVED SOLIDS (Mmhos)				1,460			
CAUSTICITY ppm (OH) as $CaCO_3$							
pH				7.3			
SULFITE (SO_3) ppm							
PHOSPHATES (PO_4) ppm							
	Poly						
	Ortho						
CHROMATE as ppm				.053			

Tests By Ellen Martin

Remarks:

cc: Charlie Mathis

TION COMMISSION
lexico

SIS

ira/ Gas Well No. #4

l ☐ Fee

T ___ S - R ___ E ___

___

___ Depth: ___ feet.

Well Use: ___

Sample Number: #1 Date Taken: 6/14/78

Specific Conductance: 1950 m/n

Total dissolved Solids: 1814± PPM.

Chlorides: 1448 PPM.

Sulfates: ___ PPM.

Ortho-phosphates: ☐ V. low ☐ Low ☐ Med. ☐ High

Sulfides: ☒ None ☐ Low ☐ Med. ☐ High

___ : ___

Date Analized: 6/15/78 By: John W. Runyan
N.M.O.C.C.

Remarks: ___

25 ml Sample = 1420 factor X 10.2 titration = 1448.4