GW - 174

PERMITS, RENEWALS, & MODS Application

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

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

December 20, 2005

Mr. Richard Duarte
El Paso Natural Gas Co.
3801 Atrisco Blvd. NW
Albuquerque, NM 87120

RE: Discharge Permit Renewal GW-174
El Paso Natural Gas Co.
White Rock Compressor Station
San Juan County, New Mexico

Dear Mr. Duarte:

The ground water discharge permit renewal GW-174 for the El Paso Natural Gas Co. (El Paso) White Rock Compressor Station located in the NE/4 of Section 15, Township 23 North, Range 14 West, NMPM, San Juan County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (NMOCD) Santa Fe office within thirty days of receipt of this letter.**

The discharge permit renewal application letter, dated April 13, 2005, submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations includes all earlier applications and approvals and all conditions later placed on those approvals. The discharge permit is renewed pursuant to Section 3109.C. Note Section 3109.G, which provides for possible future amendment of the permit. Be advised that approval of this permit does not relieve El Paso of responsibility should operations result in pollution of surface water, groundwater or the environment. Nor does it relieve El Paso of its responsibility to comply with any other governmental authority's rules and regulations.

Also be advised that all exposed pits, including lined pits and open tanks (exceeding 16 feet in diameter) shall be screened, netted or otherwise rendered non-hazardous to wildlife including migratory birds.

Section 3104 of the regulations provides: "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C, El Paso is required to notify the Director of any facility expansion, production increase or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4, this permit is for a period of five years. This permit will expire on February 8, 2010, and El Paso should submit an application in ample time before that date. Section 3106.F of the regulations states that if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

The discharge permit renewal application for the El Paso White Rock Compressor Station is subject to WQCC Regulation 3114. Every facility submitting a discharge permit application is assessed a filing fee of $100.00. There is a permit renewal fee assessed for gas compressor stations with greater than 1,000 horsepower of $1,700.00.

On behalf of the staff of the NMOCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Roger C. Anderson
Chief, Environmental Bureau
Oil Conservation Division

RCA/eem
Attachment

Xc: NMOCD Aztec Office

ATTACHMENT TO THE DISCHARGE PERMIT RENEWAL GW-174
EL PASO NATURAL GAS CO.
WHITE ROCK COMPRESSOR STATION
DISCHARGE PERMIT APPROVAL CONDITIONS
December 20, 2005

1. Payment of Discharge Permit Fees: Neither of the required fees has been received by the NMOCD. The filing fee of $100 and the permit fee of $1,700 are both due and payable upon receipt of this approval.

2. Commitments: El Paso will abide by all commitments submitted in the discharge permit renewal application letter dated April 13, 2005 and these conditions for approval.

3. Waste Disposal: All wastes will be disposed of at an NMOCD-approved facility. Only exempt oilfield wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an NMOCD-approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge permit will be approved by the NMOCD on a case-by-case basis. Rule 712 Waste: Pursuant to Rule 712, disposal of certain non-domestic waste is permitted at solid waste facilities permitted by the New Mexico Environment Department as long as:
    1. the waste stream is identified, and authorized, as such in the discharge permit, and;
    2. existing process knowledge of such waste stream does not change without notification to the Oil Conservation Division.

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

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

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

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

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

9. Below-Grade Tanks/Sumps: All below-grade tanks, sumps, and pits must be approved by the NMOCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All below grade tanks and sumps must be tested annually. Results of such tests shall be maintained at the facility covered by this discharge permit and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch

above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other NMOCD-approved methods. The NMOCD will be notified at least 72 hours prior to all testing.

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be approved by the NMOCD prior to installation and must be tested to demonstrate their mechanical integrity every five (5) years. Results of such tests shall be maintained at the facility covered by this discharge permit and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the NMOCD. The NMOCD will be notified at least 72 hours prior to all testing.

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

12. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

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

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

15. Storm Water Plan: El Paso shall maintain storm water runoff controls. As a result of operations, if any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6.2.3101 is discharged in any storm water run-off, then El Paso shall: take immediate actions to mitigate the effects of the run-off, notify the NMOCD within 24 hours, and modify the discharge permit to include a formal storm water run-off containment plan and submit for NMOCD approval within 15 days.

16. Closure: The NMOCD will be notified when operations at the White Rock Compressor Station are discontinued for a period in excess of six months. Prior to closure of the facility, the company will submit a closure plan for approval. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

17. Conditions accepted by: El Paso, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. El Paso further acknowledges that the division for good cause shown as necessary to protect fresh water, human health and the environment may change the conditions and requirements of this permit administratively.

El Paso Natural Gas Co.

Print Name: _____

Signature: _____

Title: _____

Date: _____

elpaso Natural Gas

February ~~17~~, 2005
4-13-2005

Roger Anderson, Bureau Chief
NMOCD – Environmental Bureau
~~2040 South Pacheco Street~~ 1220 S. St. Francis Dr.
Santa Fe, New Mexico 87505

Return Receipt Requested
7003 2260 0003 2920 ~~3614~~ 8354

Re: Discharge Plan GW-174 Renewal; El Paso Natural Gas Company's White Rock Compressor, San Juan County, NM

Dear Mr. Anderson:

Enclosed please find the documents related to the renewal of the Station's Discharge Plan. This station is located on Navajo Nation lands. Except for the "wash-down" water from washing the turbines and storm-water runoff, White Rock Station is a zero discharge facility, with all the wastewater discharging into a double-lined pond.

Please contact me at (505) 831-7763 if you have any questions regarding this renewal application or if you wish to schedule a site inspection.

Sincerely,
Review
Richard Duarte

Richard Duarte
Environmental Representative
Compliance Services Department

Enclosure (application – 1 original & 1 copy)

Copy (with enclosure):
Denny G. Foust
NMOCD – Environmental Bureau
1000 Rio Brazos Street
Aztec, NM 87410

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

State of New Mexico
Energy Minerals and Natural Resources

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

Revised June 10, 2003

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

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

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

☐ New ☒ Renewal ☐ Modification

1. Type: **Natural Gas Transmission Station – Whit Rock Station**

2. Operator: **El Paso Natural Gas Company**

   Address: P. O. Box 127, Bloomfield, NM 87413

   Contact Person: Richard Duarte Phone: (505) 831-7763

3. Location: /4 NE /4 Section 15 Township 23-N Range 14-W
   Submit large scale topographic map showing exact location.

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

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

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

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

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

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

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

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

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

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

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

Name: **Richard Duarte** Title: **Environmental Engineer**

Signature: Richard Duarte Date: 2/7/05

E-mail Address: ricardo.duarte@elpaso.com

White Rock Compressor Station
Discharge Plan
RENEWAL Application

Prepared for:

New Mexico Oil Conservation Division

February 7, 2005

El Paso Natural Gas Company

Headquarters at
2 North Nevada Street
Colorado Springs, Colorado 80903

White Rock Compressor Station

Discharge Plan Renewal Application

This Discharge Plan has been prepared in accordance with New Mexico Oil Conservation Division (OCD) "Guidelines for the Preparation of Ground Water Discharge Plans at Natural Gas Processing Plants".

I. General Information

El Paso Natural Gas (EPNG) Company operates a natural gas compressor station known as "White Rock Compressor Station".

A. Discharger:

All correspondence regarding this discharge plan should be sent to EPNG headquarters at the address below:

Russ S. Pyeatt, Manager
San Juan Area
El Paso Natural Gas Company
P. O. Box 127
Bloomfield, NM 87413
(505) 632-6001

B. Local Representative

A copy of all correspondence and all questions should be directed to Albuquerque Division-Compliance Services Engineer.

Richard Duarte
Principle Compliance Engineer
El Paso Natural Gas Company
3801 Atrisco Blvd. NW
Albuquerque, NM 87120
(505) 831-7763

C. Location of Discharge

White Rock Compressor Station is located in the NE 1/4 Portion, Section 15, Township 23-N, Range 14-W, NMPM, in San Juan County, New Mexico. The station is approximately 22 miles north of Newcomb, New Mexico at Milepost 33.

D. Type of Natural Gas Operation

The compressor facility pressurizes Natural Gas from EPNG's 1202, and 1212 pipelines. Both streams flow through horizontal filters/separators before going to the compressors. The installation includes one GE Frame 3, 10,000 horsepower turbine and one upgraded GE Frame 3, 6,670 horsepower turbine, and their associated equipment.

Major operational components are:

- two GE Frame 3 turbines
- two inlet natural gas scrubbers
- one fuel gas filter
- four engine coolant (ethylene glycol) fin-fans
- one full time electric generator and one auxiliary electric generator
- two lube oil storage tank (210 BBL and 20 BBL)
- one above ground ethylene glycol tank (65 BBL)
- one below grade waste liquids tank (240 BBL)

Discharges from each of the above components are discussed separately in section II of this application.

II. Plant Processes

Compressors:

The compressors have been installed in such a manner as to ensure containment of drips, spills and washdown water. Any spill or washdown water from cleaning operations are contained and discharged into a below grade storage tank.

Used oil is generated at a rate of approximately 40 gallons per 2,000 hours of operation. This oil is drained into a 240 BBL below grade storage tank and hauled from the site by an oil recycler.

Inlet & Fuel Gas Scrubbers:

Two suction scrubbers, one on the inlet side of each compressor unit remove natural gas liquids. Natural gas liquids generated by these scrubbers are discharged to the 240 BBL below grade storage tank. This tank has double wall carbon steel construction with a liquid sensor to detect leaks. The volume of liquids will vary.

A fuel gas filter is at the inlet to the fuel gas line for both turbines. Any natural gas liquids from this scrubber will also be discharged to the 240 BBL below grade storage tank.

Lube Oil Storage Tank:

A 20 BBL lube oil storage tank is located on-site and supplies oil to the electric generators. In addition, a 210 BBL lube oil storage tank is located on-site to supply oil to both turbines. Both these units have concrete secondary containment berms.

Ambitrol

A 65 BBL ethylene glycol storage tank is located onsite. Ethylene glycol is used to cool the turbines. The ethylene glycol tank has a concrete secondary containment berm.

Underground Drain Lines:

All underground piping and drain lines carrying either chemical commercial products or waste liquids have been hydrostatically tested. The below grade storage tank has secondary containment with a leak detection system.

Effluent Handling and Site Housekeeping:

The White Rock Compressor Station has state-of-the-art equipment and controls. This equipment minimizes on-site chemicals and prevents and mitigates any unplanned releases to the environment. Regularly scheduled maintenance procedures also help to ensure that the equipment remains functional and thus the possibility of spills or leaks is further minimized. The MSDS sheets for all chemicals handled at the station can be provided upon request.

This site is visited on a weekly or as-needed basis by EPNG personnel. Leaks, spills, and drips are managed as follows:

Small spills are absorbed by the soil or commercial absorbent pads. Any contaminated soil is excavated and contained in drums for recycle or off-site disposal.

Large spills are contained by the drain system or with commercial absorbent pads. Where possible, liquids and solid waste are segregated and managed in separate drums for recycle or disposal.

The waste generated from either scenario above is characterized and recycled if possible. If not recyclable, the waste is disposed according to its analytical profile.

Verbal and written notification of leaks or spills, as applicable, are made to the Bureau of Indian Affairs, Navajo Nation EPA and OCD in accordance with BIA—Navajo Area Office Procedures for Undersirable Events Response (Oil and Gas Operations) and OCD Rule 116. Any release of a chemical with a reportable quantity regulated by Title 40 Code of Federal Regulations Parts 300 through 372 are reported to the National Response Center, and where applicable NMED.

III. Effluent and Solid Waste Disposal

There is minimal liquid and solid waste generated. All effluent and solid waste is characterized and managed for recycle, if possible, or disposal according to their analytical profile. Effluent and solid waste that cannot be recycled is disposed of in facilities approved by OCD, NMED or other jurisdictional agencies.

On-site effluent disposal utilizes the double-lined evaporation pond. This pond is used for evaporative disposal of air cooling water at an estimated rate of 10,000 gal/day during the summer months. The system's use is limited to the brief periods when hot ambient conditions occur during the day. This impoundment equipped with a leak detection system that is periodically inspected for any leaks of the lined pond.

The double-lined evaporation pond is constructed using only top quality materials. The top liners is high-density polyethylene (60-mil., minimum), 8130-XR-5 Material (30mil., minimum), industrial grade reinforced chlorosulfonated polyethylene (Hypalon, 36 mil. minimum), polypropylene (40 mil., minimum), or scrimreinforced polypropylene (45 mil., minimum). The bottom liner is PVC (30 mil., minimum), high density polyethylene (30 mil., minimum), chlorinated polyethylene (30 mil., minimum), chlorosulfonated polyethylene (30 mil., minimum), polypropylene (30 mil., minimum), or scrimreinforced polypropylene (45 mil., minimum). The geonet is a high density polyethylene (200 mil., minimum). The geotextile is a heavyweight non-woven polypropylene geotextile (16 oz/yd., minimum).

The leak detection system's a drain line is a 4 inch PVC perforated pipe. Pipes within the bottom liner containment volume (leak detection field) are perforated. Pipe located between the leak detection well and the pond shall have solid walls (no perforations). The pipes are installed to the grades shown in the design drawings.

The site also has a septic tank to treat domestic sewage. The septic system only receives sewage from one wash room with one toilet and one wash basin. This system was constructed in accordance with NMED guidelines for on-site disposal systems.

IV. Site Characteristics

White Rock Compressor Station is located within the Navajo section of the Colorado Plateau physiographic province, in the south central portion of the San Juan structural basin (55.92 mi. northeast of Gallup). Topographic relief within 1 mile of the site is approximately 250 feet with elevations ranging between 5,700 and 5,950 feet above sea level.

The average annual precipitation in the area ranges between 5 and 10 inches.

a. Geomorphology and Soils

The compressor station is located on a low plateau which separates Hunter Wash and the Chaco River. The mesa slopes slightly to the west, and other low mesas are present across the river.

The major soil association in the area of the compressor site is the Badland-Rock Land association (USSCS, 1973). The USSCS classifies this association as, "occupying the nearly level in the narrow alluvial valley bottoms, through rolling hills, to very steep slopes on escarpments and breaks". The surface layer is fine sandy loam. The soil ranges between 8 to 20 inches deep. There is very little vegetation, most of it is found in the arroyo bottoms. Most of the vegetation consists of several different grasses, and a few shrubs.

b. Regional Geologic Setting

The compressor station is located within the west-central portion of the San Juan Basin (See Topographic Map attached as Tab "E"). The deepest portion of the basin contains up to 15,000 feet of Paleozoic and Mesozoic sediments (Fassett and Hinds, 1971). Late Cretaceous age rocks outcrop in the mountains west of the compressor station (Stone et. al, 1983).

Fruitland Formation

The Fruitland Formation contains the principal coal reserves of the San Juan Basin. The Fruitland Formation has similar hydrologic properties as does the Kirtland Shale. The Fruitland Formation consists of interbedded, sandy shale, carbonaceous shale, clayey sandstone, coal, and sandstone. The thickness of the Fruitland is generally between 200 and 300 feet. Several tests conducted as a part of the U.S. Geological Survey coal studies indicate a wide range of transmissivities (from 0.6 to 100 ft^2/d).

Pictured Cliffs Sandstone

The Pictured Cliffs Sandstone descends to a maximum depth of 4,130 ft in the basin center. The formation is defined by a thin interval of interbedded sandstone and shale, and conformably overlies the Lewis Shale.

Lewis Shale

The Lewis Shale intertongues with the upper section of the cliff house sandstone, and a thin interval of this formation also intervenes between the Menefee, and Cliff House.

Cliff House Sandstone

The Cliff House Sandstone is the upper most member of the Mesaverde Group. The Cliff House forms the top or eastern flanks of the Hogback monocline marking the edge of the

central basin. The Cliff House unconformably overlies the Menefee Formation. The Cliff House is composed of fine to very fine-grained, immature to submature subarkose. The unit varies from 20 to 245 feet thick throughout the basin.

Menefee Formation

The Menefee Formation conformably or disconformably overlies the Point Lookout Formation. The Menefee Formation is the middle unit of the Mesaverde Group. This unit crops out in the center of the Hogback monocline west of Farmington, New Mexico, and in a vast area of the Chaco slope. The Menefee Formation consists of two separate members based on the presence or absence of coal: the basal Clearly Member (coal bearing) and the upper Allison Member (non-coal bearing). The Menefee Formation is composed of interbedded claystone, carbonaceous siltstone and shale, coal, and sandstone. The thickness of the Menefee Formation varies from 400 to 1,000 feet.

Point Lookout Sandstone

The Point Lookout Sandstone is the lowest member of the Mesaverde Group. The Point Lookout is exposed in the Hogback monocline west of Farmington, New Mexico. The Point Lookout is composed of very fine to medium-grained, immature to submature, lithic arkose to arkose. The thickness of this unit varies from 40 to 415 feet. The Point Lookout lies conformably on the Mancos Shale.

c. Local Geology

The White Rock Compressor Station is located on relatively flat plains 55.92 miles northeast of Gallup, New Mexico, on the Navajo Indian Reservation. The facility has two (2) water wells located on the plants property. Well #1 was abandoned in1991 and Well #2 is the present plant water supply well. The drillers' logs for these wells report that up to 605-feet of Fruitland and Cliff House Formation were encountered. Both formations are continental deposits with interbedded sandstone, mudstone, coal and shale. The Fruitland is predominantly shale and mudstone, and the Cliff House is predominantly sandstone.

d. Hydrology and Groundwater Quality

Regional Groundwater Hydrology and Water Quality

Three major groundwater systems are present in the Cretaceous and younger-age sedimentary deposits of this area of the San Juan Basin (Stone et. al, 1983). These aquifers are:

1. Confined aquifers within the Cretaceous and Tertiary sandstone units.

2. Water-table aquifers in the Cretaceous and Tertiary sandstone units near their outcrop areas.

3. Water-table aquifers in Quaternary alluvium, in river valleys and their tributaries.

Cretaceous units

Occurrence of groundwater resources associated with Cretaceous units is a function of the distribution of sandstone beds within these units. Recharge is dependent upon outcrop distribution, elevation, climate of the outcrop area, lithologic characteristics of the unit and leakage from other units. Hydraulic conductivity is usually low due to the fine-grained textures characteristic of these sediments.

Groundwater quality in Cretaceous sandstone aquifers is controlled by several factors. Total dissolved solids (TDS) concentrations increase as a function of increasing groundwater residence time and reduced transmissivity of aquifer materials. Fresh water is associated with low transmissivity zones. Groundwater moving along the sandstone-shale interfaces common to these rocks to exhibit increased TDS concentrations (Stone et. al, 1983). Water from these confined aquifers is suitable for stock and domestic use in some areas, although in most cases it is not considered a major source.

Tertiary units

Groundwater occurrence in Tertiary units is associated with the distribution of sandstone beds within these units. Groundwater recharge occurs through formations exposed along the flanks of the Nacimiento Uplift on the broad plateaus along the central part of the basin. Recharge amount to Tertiary aquifers is higher than that of Cretaceous aquifers due to broader exposures in areas of high precipitation. Groundwater in these aquifers flows from upland recharge areas to discharge areas along canyon floors. Springs and seeps result due to regional topography and geomorphic controls. The hydraulic conductivity of the Tertiary sandstone varies significantly as a function of grain size, sorting and cementation. The hydraulic gradient is controlled by topography, but the structural attitude of formation can alter the flow direction.

Tertiary sandstone aquifers have generally lower TDS concentrations than the Cretaceous aquifers (Stone et. al, 1983), and commonly provide major sources of water for domestic and agricultural usage. The complex intertonguing of sandstone and shale units is the primary influence on specific conductance, which can be as high as 10,500-μm/cm.

Quaternary units

Quaternary age aquifers occur primarily as valley fill in the major river valleys and consist of gravel, sand, silt, and clay. In arroyos the groundwater quality and quantity is highly variable. Where available, water from this source is used for stock, irrigation and domestic purposes.

Local Groundwater Hydrology and Quality

According to topographic (See Tab "F") maps published by the New Mexico Oil Conservation Division to support "Vulnerable Area Order", R-7940-C, and the White Rock Compressor Station is located outside the vulnerable zone.

EPNG has drilled two water supply wells at the facility. Well #1 was drilled in June, 1966 to a depth of 1,910 feet, and plugged back to 597 feet. This well was abandoned in 1991 because the well was silting up and no longer producing properly.

Well #2 was drilled in September, 1991. The drill log for EPNG Well#2 indicates that water bearing sands are located at a depth of 230 to 430 feet (200 ft. thick) and 433 to 480 ft. (47 ft. thick) deep. This well is completed in a sandstone unit of the cliff house. This aquifer appears to be a confined aquifer because the well is screened from 432 to 592 feet, and the static water level is 218.8 feet. The drill logs also report the presence of several 20 to 30 foot thick shale and coal layers above the water bearing sandstone which could act as confining layers.

According to Stone et. al. (1980) there are no other water wells located within one mile of the White Rock Compressor station. Eight wells are located within 6 miles of White Rock Station, all upgradient, to the east.

e. Surface Water Hydrology and Flooding Potential

White Rock Compressor Station is located on a low plateau between Hunter Wash and the Chaco River. Both are ephemeral drainage's over two miles from the plant. Neither are permanent surface waters in the vicinity of the plant, which would add to the flooding potential for the facility.

Drainage from the plant is to the north towards Hunter Wash over two miles away. Hunter Wash enters the Chaco River about 12 miles to the west. There is no direct conveyance between the plant and Hunter Wash. There is therefore little likelihood that any water run off from the station could reach any water way of the United States.

EL PASO NATURAL GAS

February 24, 2000

Roger Anderson, Bureau Chief
NMOCD – Environmental Bureau
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Certified Mail
Return Receipt Requested
P 412 249 534

Re: Discharge Plan GW-174 Renewal; El Paso Natural Gas Company's White Rock Compressor, San Juan County, NM

Dear Mr. Anderson:

Enclosed please find the signed Certification for the Discharge Plan at the subject facility. As per my discussions with you and your staff, EPNG has amended the completion date of the mechanical integrity for any underground process lines to July 28, 2000 (reference Condition No. 10). Accordingly, the previous date was marked out and the new date inserted.

Lastly, although the Navajo Nation EPA did not protest this Plan's renewal, it is EPNG's understanding that the issues of jurisdiction originally raised by the Navajo EPA when the permit was initially issued have not yet been resolved. Nonetheless, EPNG respectfully submits the enclosed Certification and will abide by the conditions of the Discharge Plan.

Please contact me at (505) 831-7763 if you have any questions regarding this Discharge Plan or if you wish to schedule a site inspection.

Sincerely,

Richard Duarte
Principal Environmental Engineer
Pipelines West Environment Department

Enclosure (original)

Copy (with enclosure):

Wayne Price, Engineer
NMOCD – Environmental Bureau
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Blind Copy (w/ Discharge Plan Renewal documents):

Russ S. Pyeatt
Sandra D. Miller

File: White Rock Station – Wastewater
R. Duarte's Chron. (w/out enclosures)

ATTACHMENT TO THE DISCHARGE PLAN RENEWAL GW-174
EL PASO NATURAL GAS COMPANY
WHITE ROCK COMPRESSOR STATION
DISCHARGE PLAN APPROVAL CONDITIONS
(January 6, 2000)

1. Payment of Discharge Plan Fees: The $50.00 filing fee and the required flat fee has been received by the OCD. There is a required flat fee equal to one-half of the original flat fee for compressor stations.

2. El Paso Natural Gas Company Commitments: El Paso Natural Gas Company will abide by all commitments submitted in the discharge plan renewal application dated October 8, 1999 and these conditions for approval.

3. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste characterization per 40 CFR Part 261.

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

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

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

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

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

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

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than ~~December 31, 1999~~ July 28, 2000 and every 5 years, from tested date, thereafter. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

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

12. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

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

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

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

16. Certification: El Paso Natural Gas Company, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. El Paso Natural Gas Company further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

EL PASO NATURAL GAS COMPANY

by V. P. Transmission Operations
Title

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

New Mexico DRUG FREE It's a State of Mind!

February 8, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-176-012-101

Mr. Donald N. Bigbie
El Paso Natural Gas Company
P.O. Box 1492
El Paso, Texas 79901

Re: Discharge Plan (GW-174)
White Rock Compressor Station
San Juan County, New Mexico

Dear Mr. Bigbie:

The groundwater discharge plan GW-174 for the El Paso Natural Gas Co. White Rock Compressor Station located in the NE/4 Section 15, Township 23 North, Range 14 West, NMPM, San Juan County, New Mexico **is hereby approved** under the conditions contained in the enclosed attachment. The discharge plan consists of the application dated July 23, 1994.

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

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that section 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.

VILLAGRA BUILDING - 408 Galisteo
Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830
Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco
Office of the Secretary
827-5950
Administrative Services
827-5925
Energy Conservation & Management
827-5900
Mining and Minerals
827-5970
Oil Conservation
827-7131

Pursuant to Section 3-109.G.4., this approval is for a period of five years. This approval will expire February 8, 2000 and you should submit an application for renewal in ample time before that date.

The discharge plan application for the El Paso Natural Gas Co. White Rock Compressor Station is subject to the WQCC Regulation 3-114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty (50) dollars and a flat rate fee. The flat rate fee for a facility with greater than a 3000 horsepower site rating is one-thousand three hundred eighty dollars ($1,380.00).

The $50.00 filing fee has been received by the OCD. The flat fee for an approved discharge plan may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan with the first payment being due upon receipt of this letter.

Please make all checks payable to the NMED - Water Quality Management and send to the OCD Santa Fe Office.

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/cee
Attachment

xc: OCD Aztec Office

ATTACHMENT TO THE DISCHARGE PLAN GW-174 APPROVAL
EL PASO NATURAL GAS COMPANY
WHITE ROCK COMPRESSOR STATION
DISCHARGE PLAN REQUIREMENTS
(February 8, 1995)

1. Drum Storage: All drums will be stored on pad and curb type containment.

2. Sump Inspection: All pre-existing sumps will be cleaned and visually inspected on an annual basis. Any new sumps or below-grade tanks will approved by the OCD prior to installation and will incorporate leak detection in their designs.

3. Berms: All tanks that contain materials other than freshwater will be bermed to contain one and one-third (1-1/3) the capacity of the largest tank within the berm or one and one-third (1-1/3) the total capacity of all interconnected tanks.

4. Pressure testing: All discharge plan facilities are required to pressure test all underground piping at the time of discharge plan renewal. All new underground piping shall be designed and installed to allow for isolation and pressure testing at 3 psi above normal operating pressure.

5. Spills: All spills and/or leaks will be reported to the OCD Santa Fe and appropriate district office pursuant to WQCC Rule 1-203 and OCD Rule 116.