

Basis of Decision
Rescission of PSD Permit NM-1644-M1
Enterprise Field Services LLC.
Lindrith Compressor Station
March 7, 2018

In a letter dated July 27, 2017, Enterprise Products, Enterprise Field Services LLC, requested EPA rescind the above PSD permit for the Lindrith Compressor Station, upon issuance of the Synthetic Minor Permit for the Lindrith Compressor Station.

Regulatory Authority:

40 CFR § 52.21(w)(2) & (3) allows the rescission of a PSD permit at the request of the applicant, if EPA determines that the PSD permit would not apply to the source. This rule became effective on December 7, 2016.

Background:

PSD-NM-1644-M1 was issued for the Lindrith Compressor Station (Lindrith) in 1997 to El Paso Field Services. The permit contained emission limits for the three compressor engines and a dehydrator. The emission limits in the permit were that of a minor source [Attachment A], resulting from the operation of catalytic controls for CO and VOC on two of the three engines. The permit documents indicate that it is a minor NSR source with a PSD permit. In 2003, EPA issued the initial Title V permit for Lindrith and included the emission limits in the permit noting it is a synthetic minor source. In 2005, EPA transferred this Part 71 permit to the new owners, Enterprise Products.

In 2015, EPA issued the Part 71 permit renewal for Lindrith, that included several changes to the equipment at the facility to reduce VOC flash emissions. The Statement of Basis for the 2015 Part 71 permit [Section 4 e. PTE] states, “[T]he PTE listed in the initial Title V permit for non-HAP emission was less than PSD applicability (i.e., the Lindrith Compressor Station was a synthetic minor source of regulated NSR pollutants)”.

On March 2017, Enterprise requested a minor amendment to the Part 71 permit to increase the VOC permitted emission limits. Enterprise followed with a synthetic minor permit application and provided other supplemental information at the request of EPA through December 2017. EPA drafted the synthetic minor permit and e-public noticed this permit on January 24, 2018. Public comment period ends February 23, 2018. Since there were no comments or requests for public hearing, EPA will issue the final permit on March 7, 2018.

Technical Analyses:

In 1995, when the expansion/modification of the Lindrith was proposed, the only intermediary permitting on tribal lands for practical enforceability for the catalytic controls on two engines was the issuance of a PSD permit. There was no minor NSR permit regulations for tribal lands.

The 1997 modification to upgrade the limits on the compressor engines that resulted in an increase in VOC emissions of 98.9 tpy still did not meet the 250 tpy threshold of a major PSD source. The Preliminary Determination summary to this permit stated, “This facility is permitted by EPA as a minor stationary source with emissions below the major source threshold of 250 tpy,” [Attachment A].

On March 22, 1999, EPA implemented the Part 71 permit program in Indian Country. El Paso Field Services applied for the initial Part 71 permit for the Lindrith Compressor Station since the facility was operating a dehydrator and was a major source of HAP emissions with VOC emissions > 100 tpy.

The initial Part 71 permit issued for Lindrith specifically indicated the source is operating as a synthetic minor PSD source, and incorporated the emissions and limits of the PSD permit. This permit was administratively amended in 2006 for the new owner, Enterprise Field Services (Enterprise).

Enterprise submitted a permit renewal in 2008 and requested NSR changes. In response to EPA’s evaluation of the permit application regarding major equipment and facility reconfigurations, Enterprise responded that in the issued PSD permit there are clear statements the facility was operating as a synthetic minor NSR source, which allowed minor NSR changes.

In 2013, Enterprise submitted a synthetic minor permit for Lindrith per the Tribal NSR regulations of 2011. The Tribal minor NSR rule, 40 CFR 49.151, was effective on August 30, 2011 for all existing sources in Indian country. However, EPA did not have authority to rescind the existing PSD permit until the rescission rule was promulgated, and therefore EPA proceeded to issue the Part 71 permit renewal on November 11, 2015, which included the NSR modifications. The 2011 rule had provisions which allowed the existing Part 71 sources to maintain synthetic minor status when the permit had practical enforceable, recordkeeping and monitoring requirements in the Part 71 permit. 40 CFR § 49.153(a)(3)(iv) states, “If you own or operate a synthetic minor source or synthetic minor HAP source that was established prior to the effective date of this rule through a permit with enforceable emissions limitation issued pursuant to the operating permit program in part 71 of this chapter, the reviewing authority has the discretion to require you to apply for a synthetic minor source permit under §49.158 of this program or to allow you to maintain synthetic minor status through your part 71 permit.” (emphasis added). The Title V permit also indicated the source is operating as a synthetic minor permit and states, “[T]he limitations in Table 2.1 are carried forth from PSD-NM-1644-M1 and the initial Title V permit, established the Lindrith Compressor Station as a synthetic minor source for NSR purposes.”

On March 13, 2017, Enterprise submitted an amendment to the Part 71 permit to increase VOC emission limits. EPA requested that Enterprise now should consider applying for NSR amendments utilizing the tribal minor NSR synthetic minor permit application. EPA worked with the applicant to obtain sufficient information to process the draft permit that was publically noticed on January 24, 2018. Public comment period ended on February 23, 2018. Since no public comments on the draft permit were received, this synthetic permit will be issued by EPA on March 7, 2018, with the notification of the permit rescission according to 40 CFR 52.21(w), e-noticed at www.epa.gov/publicnotices on March 7, 2018.

Summary:

The initial and existing Part 71 permit issued to the Lindrith Compressor Station (Lindrith) has clear statements indicating that the emissions from the source are less than 250 tpy and the source is operating as a synthetic minor source. All the enforceable conditions in the PSD NM-1644-M1 permit are part of the Part 71 permit and the proposed synthetic minor permit. On the basis of this information, EPA concludes that Lindrith operates as a synthetic minor source with emissions less than 250 tpy [major source threshold for an un-named CAA source category], and therefore the PSD permit can be rescinded and substituted with the synthetic minor permit, R6-NM-005.

Attachment A
- PSD-NM-1644-R1

file: Lindrith (Regulatory) 130



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

APR 10 1997

Mr. Mike Blanco
Director of Operations
El Paso Field Services
614 Reilly Avenue
Farmington, NM 87499

RE: Permit NM-1644-M1 - El Paso Field Services -
Lindrith Compressor Station - Jicarilla Apache
Reservation

Dear Mr. Blanco:

On August 1, 1996, the Environmental Protection Agency received your application for a permit to up rate three existing Caterpillar engines at the Lindrith compressor station located in Rio Arriba County, New Mexico, approximately 20 miles west of Lindrith, New Mexico. We have completed the review of the application. The enclosed permit, NM-1644-M1, is your authorization to operate the compressor station under the conditions stipulated. The entire file is documented and available for review at our office at 1445 Ross Avenue, Dallas, Texas 75202.

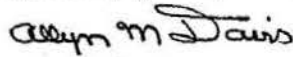
Any person who filed comments on the draft permit, or participated in a public hearing for this permit, may petition the Administrator to review any condition of the permit decision. Any person who failed to file comments, or failed to participate in the public hearing on the draft permit, may petition for administrative review of the permit only to the extent of the changes from the draft to the final permit decision, if any (see 40 Code of Federal Regulations 124.19). The original and one copy of any petition for review must be filed within 30 days from the date this letter is received by the permittee. It should be addressed as follows:

Headquarters Hearing Clerk
401 M Street, S.W.
Mail Code 1900
Environmental Protection Agency
Washington, DC 20460

If such a review is requested, the permit decision is not a final agency action, and the permit is not effective. A petition for review is, under 5 United States Code 704, a prerequisite to the seeking of judicial review of the final agency action.

If you have any questions concerning this permit, please contact Ms. Mary A. Stanton of my staff at (214) 665-8377.

Sincerely yours,



Allyn M. Davis
Director
Multimedia Planning and
Permitting Division

Enclosure

cc: President Leonard Atole
Jicarilla Apache Tribe

Mr. Mark Weidler
New Mexico Environment Department

Ms. Pamela Kirschner
El Paso Field Services ✓

Permit Number PSD-NM-1644-M-1

AUTHORIZATION TO CONSTRUCT AND OPERATE A NEW OR MODIFIED
FACILITY PURSUANT TO THE PREVENTION OF SIGNIFICANT
DETERIORATION REGULATIONS IN 40 CFR 52.21 et seq

In accordance with the provisions of the Clean Air Act, as amended, 42 U.S.C. 7475 and 40 CFR 52.21, as amended August 7, 1980,

El Paso Field Services
P.O. Box 4990
Farmington, NM 87499

is authorized to uprate its three existing (site) Caterpillar 3612 series engines from 2500 HP to 3335 HP, increase the capacity of the existing 65-MMscf/d glycol dehydrator system to 90-MMscf/d, and install a flash tank and vent gas emission control system at their Lindrith Compressor Station located 20 miles west of Lindrith, NM and approximately 7 miles north of Counselor in

Rio Arriba County, New Mexico

subject to the emission limitations, monitoring requirements and other conditions set forth hereinafter, in the General and Special Provisions.

The permit shall be effective on April 10, 1997 unless a petition to the Administrator for review of the permit is filed in accordance with the requirements of 40 CFR 124.19.

This permit and authorization to construct shall expire at midnight on October 10, 1999 unless physical on-site construction has begun by such date or binding agreements or contractual obligations to undertake a program of construction of the source are entered into by such date.

Signed this 10 day of April, 1997.

Allyn M Davis
Allyn Davis
Director
Multimedia Planning and Permitting Division (6PD)
United States Environmental Protection Agency Region 6

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within sixty (60) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:
 - (a) description of noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
 - (d) steps taken by the permittee to reduce and eliminate the noncomplying emission, and
 - (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in this permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.
8. The permittee shall allow representatives of the Environmental Protection Agency, upon the presentation of credentials at reasonable times:
- a. to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - c. to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - d. to sample at reasonable times any emission of pollutants; and
 - e. to perform at reasonable times an operation and maintenance inspection of the permitted source.
9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to the:
- Director, Multimedia Planning & Permitting Division
Environmental Protection Agency
Region 6
First Interstate Bank Building
1445 Ross Avenue
Dallas, Texas 75202-2733
10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

SPECIAL PROVISIONS

PSD-NM-1644

as
marked

1. This permit covers only those sources of emissions listed in the attached table entitled "Table 1. - Maximum Allowable Emission Rates" and those sources are limited to the emission limits and other conditions specified in that attached table.
2. Testing on those engines with catalytic oxidation systems shall be performed upstream and downstream from these systems to ensure that they are functioning as specified in the manufacture's literature as follows:
 - A. The holder of this permit shall perform quarterly samples of the catalyst efficiency using a Draeger tube method or a portable analyzer.
 - B. If catalyst fails to meet the required percent reductions of CO, the holder of this permit must regenerate or replace the catalyst within 45 days of discovery, and the emissions must be retested pursuant to S.P. 2A above.
 - C. If upon resampling pursuant to 2B the catalyst continues to fail to meet represented efficiency the holder of this permit shall conduct emissions test in accordance with S.P. 6.
 - D. The results of all sampling pursuant to S.P. 2, A & B shall be submitted to the EPA on an annual basis in accordance with Special Provision 9. Any testing which indicates emissions in excess of any permit condition shall be reported immediately.
3. Emissions from the Internal Combustion (IC) engines shall not exceed 5 percent opacity, as determined by EPA Reference Method 9.
4. The parameters necessary to comply with the g/hp-hr limits for NOx, CO, VOC's, and SO2 (as stated in Table 1.) shall be determined during the stack sampling required in Special Provision 6 and shall be determined during the operation of each engine at four points in accordance with Special Provision 6F. The parameters necessary to establish compliance with VOC will suffice to ensure that HCHO will be in compliance as well.
5. Fuel fired in the IC engines identified as emission points #1, #2, #3 and limited to sweet natural gas of pipeline quality containing a maximum of 0.25 grains of H₂S per 100 cubic ft.

CONTINUOUS DETERMINATION OF COMPLIANCE

6. Should further testing be required, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from each engine.

A. Sampling must be conducted in accordance with EPA Reference Methods in 40 CFR, §60, Appendix A (7E for NO_x, 3A for oxygen, 10 for CO, 18 for VOCs, and 1-4 or 19 for flow rate determination)

B. Sampling by means of one of the test methods specified in 40 CFR 60.335(d) shall be conducted to determine initial compliance with the fuel sulfur limit of Special Provision 5.

Note: The natural-gas fired internal combustion engines at this location are not subject to New Source Performance Standards under 40 CFR §60. However, specific methodologies from 40 CFR §60, Subpart GG shall be followed in order to determine compliance with specific provisions in this permit.

C. The appropriate EPA Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

1. Date for pretest meeting.
2. Date sampling will occur.
3. Name of firm conducting sampling.
4. Type of sampling equipment to be used.
5. Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in the permit provisions shall be made available to the appropriate EPA Region prior to the pretest meetings. The EPA shall approve or disapprove of any deviation from specified sampling procedures prior to its use. Requests to waive testing for any pollutant specified in the permit provisions shall be submitted to the appropriate EPA Region for approval. Requests for alternate/equivalent procedures for NSPS testing shall be submitted to the appropriate EPA Region for approval.

D. Air contaminants to be tested include, (but are not limited to) NO_x, CO, VOC and opacity.

E. The holder of this permit shall monitor the sulfur content of the fuel being fired in the IC engines upon initial testing using procedures as described in 40 CFR 60.334(b). Continued demonstration compliance may be verified using an alternate method such as Length-of-Stain tube sampling and analysis in accordance with the following schedule:

1. For a period of six weeks sulfur content of the fuel shall be verified at least once a week.

2. If all samples show compliance with S.P. 5, sampling may resume at intervals of one sample per calendar quarter thereafter.

3. If any sample exceeds the concentration as specified in S.P. 5 then within 45 days the source will either retest pursuant to S.P. 6E above or demonstrate by some other means that it is in compliance with this permit. Following the retest continued compliance shall be verified in accordance with S.P. 6E 1 & 2 above.

Note: The natural-gas fired internal combustion engines at this location are not subject to New Source Performance Standards under 40 CFR §60. However, specific methodologies from 40 CFR §60, Subpart GG shall be followed in order to determine compliance with specific provisions in this permit.

F. Sampling of the IC engines shall be conducted at 25, 50, 75 and 100 percent of peak load, or at four points in the normal operating range of the IC engine, including the minimum point in the sample and peak load. All loads shall be corrected to ISO (288 degrees Kelvin, 60 percent relative humidity, and 101.3 kilopascals pressure) conditions using the appropriate equations supplied by the manufacturer. The report shall be sent to:

Division Director
Multimedia Permitting &
Planning Division
Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

7. Prior to the end of the maximum 180 day shakedown period, the following reciprocating compressor drivers shall be permanently removed, dismantled or disabled. The date each unit is removed, dismantled or disabled shall be recorded and the record maintained for a period of two years and made available to EPA on request.

SOURCE	SITE HP
1. 10-SVG,	422
2. 10-SVG,	422
3. 10-SVG,	422
4. 10-SVG,	422
5. 12-SVG,	515
6. 12-SVG,	515
7. 26-KVS Turbo,	1000
8. TLA-10	3400

TOTAL PLANT	7118

RECORDKEEPING REQUIREMENTS

8. In addition to recordkeeping requirements in General Provision 4, the following information shall be maintained in a file by the holder of this permit for a period of two years and shall be made available on request to representatives of the EPA:

- A. The results of all fuel sampling conducted pursuant to Special Provision 6E.
- B. The results of all stack tests conducted pursuant to Special Provision 6.
- C. Record of the use of the reciprocating compressors and auxiliary drivers, specified in Special Provision 7, including date, total hours per day, and unit number.

REPORTING

9. The holder of this permit shall submit on a yearly basis, to the appropriate EPA Regional Office, a report which will contain the hours of operation of the facility and a summary of the periods of noncompliance. The initial compliance testing data will be used to verify the permit criteria pollutant emissions limits of this facility, those limits will be used to calculate the annual emissions of the facility and that information will be submitted with the yearly report. The report will be submitted to the appropriate EPA Regional Office by the end of the first quarter of each year for the previous years emissions.

Table 1: Maximum Allowable Emissions Rates

Emission Point Number	% Load	NO _x			CO			VOC			SO ₂	
		g/hr	lb/hr	tpy	g/hr	lb/hr	tpy	g/hr	lb/hr	tpy	g/hr	lb/hr
1. Cat 3612 (8760 hr/yr) 3335 bhp	100%	0.70	5.15	22.54	2.2	16.2	70.85	1.4	10.3	45.08		0.074
2. Cat 3612 (8760 hr/yr) 3335 bhp (controlled)	100%	0.70	5.15	22.54	0.38	2.79	12.24	1.0	7.35	32.20		0.074
3. Cat 3612 (8760 hr/yr) 3335 bhp (controlled)	100%	0.70	5.15	22.54	0.38	2.79	12.24	1.0	7.35	32.20		0.074
5. Dehydration Reboiler (8760 hr/yr)	100%		0.86			0.17			0.05			0.00
6. Dehydration Regenerator Vent	100%								78.17			0.00
7. Fugitive Emissions	100%								3.77			0.00
TOTALS	100% tpy		62.62			93.53			191.40			0.223

PRELIMINARY DETERMINATION SUMMARY
EL PASO Field Services
LINDRITH COMPRESSOR STATION
JICARILLA APACHE RESERVATION
RIO ARRIBA COUNTY, NEW MEXICO

I. APPLICANT

El Paso Field Services
P.O. Box 4990
Farmington, NM 87499

II. LOCATION

The Lindrith Compressor Station is located in Rio Arriba County, New Mexico, approximately 20 miles west of Lindrith, New Mexico, and approximately 7 miles north of Counselor, NM. The UTM coordinates are 285.22 kilometers east, 4020.98 kilometers north, Zone 13.

III. PROJECT DESCRIPTION AND EMISSIONS

The primary purpose of this project is to uprate the horsepower on three existing Caterpillar compressor engines at the Lindrith Compressor Station located on the Jicarilla Apache Reservation in Rio Arriba County, New Mexico. The engines power compressors that are used in the transmission of natural gas. The proposed uprate will produce a corresponding increase in emissions from the site.

The three caterpillar engines (EPNs 1, 2, and 3) each have a site horsepower rating of 2,500. Two of the engines have catalytic converters to control carbon monoxide and volatile organic compound emissions. EPN -1 and EPN-2 have the catalytic converters and EPN-3 does not. The proposed project involves increasing the horsepower of each engine to the ISO rating of 3,335. The emissions rate information in the permit is based on actual test results obtained. The testing was conducted on April 17-19, 1996.

In addition to the horsepower increases, the facility proposes to increase the glycol dehydration unit throughput from 65 million standard cubic feet per day (MMscfd) to 90 million standard cubic feet per day (MMscfd). VOC emissions from the dehydrator regenerator will be reduced by the installation of a flash tank and a vent gas emission control system. Fugitive component VOC emission estimates will be recalculated based on a recount of all facility fugitive components. Updated fugitive component emission rate factors will be used in the emission estimates. The Cummins compressor engine (EPN-4) which is used to supply auxiliary

power, will be removed from the site.

The proposed horsepower uprating will result in an increase of NO_x, CO, VOC, and formaldehyde emissions from the combustion of natural gas in the three Caterpillar compressor engines. The installation of the flash tank and vent gas condenser emission control system on the glycol dehydrator regenerator vent will result in a decrease in VOC and hazardous air pollutant (HAP) emissions from the unit. The removal of the Cummins compressor engine will result in a decrease in NO_x, CO, VOC, and formaldehyde emissions.

Nitrogen oxide, carbon monoxide, volatile organic compounds and formaldehyde emissions will increase compared with existing emissions; these increases will be extremely small and will not trigger any state or federal major source permit requirements. Stack heights will meet the Good Engineering Practice (GEP) definition with respect to any downwash obstructions.

The SIC code for this facility is 4922.

This facility is permitted by EPA as a minor stationary source with emissions below the major source threshold of 250 tpy.

This permit amendment is being issued in order to uprate the horsepower of the three existing Caterpillar engines from 2500 to 3335. The only new equipment will be the addition of the flash tank and a vent gas condenser control system to the glycol dehydrator regenerator vent. No other new construction or equipment is associated with this production increase. The facility will continue to operate 24 hours per day, 7 days per week, 52 weeks per year.

These modifications will result in increases in emissions of volatile organic compounds of 98.9 tons per year, carbon monoxide of 27.23 tons per year, and nitrogen oxides of 5.43 tons per year. The total emissions from the new configuration represent 62.62 tons of NO_x, 0.223 tons of SO₂, 0.0 tons of particulate matter, 93.53 tons of CO, and 191.40* tons of VOCs.

This is not currently a major source and the increases from the project alone is below the 250 tpy major source threshold. There are no significant emissions increase of any pollutant subject to regulation under the Clean Air Act.

* Does not include CH₂O

IV. SOURCE IMPACT ANALYSIS

The emission increases are below the 250 tpy major source threshold and therefore do not require Prevention of

Significant Deterioration review. There will be an increase in emissions of nitrogen oxides (NO_x) by 5.43 tons per year, carbon monoxide (CO) of 27.23 tons per and volatile organic compounds (VOCs) by 98.9 tons per year. However, El Paso Natural Gas Company has gone through a control technology analysis, ambient air quality analysis, Class I impact analysis, growth impact analysis, soils, vegetation and visibility impact analysis, and air toxics impact analysis for the emissions associated with this project.

A. CONTROL TECHNOLOGY ANALYSIS

The Best Available Control Technology analysis is not required for this project since the proposed emission increase of all pollutants are below PSD major source threshold.

The Caterpillar 3612 engines are high-speed, turbocharged engines that greatly reduce NO_x and CO emissions. Catalytic Converters and air fuel ratio controllers are installed on two of the three Caterpillar 3612 reciprocating, natural-gas-fired engines in order to minimize CO and VOC emissions. Catalyst life should be about five years, barring damage during operation.

Good combustion control techniques was selected as control technology for the proposed installation subject to the following rationale used in making this selection: The emissions from the proposed project will not significantly increase the total emissions of NO₂, CO and VOC. Rio Arriba County is in attainment with primary NAAQS for NO₂ and costly control options are not warranted.

B. ANALYSIS OF EXISTING AIR QUALITY

No new air dispersion modeling was performed for this permit amendment application. The annual emission rates in tons per year for NO_x and CO will increase with the proposed production increase. However, the proposed short-term emission rates for both NO_x and CO are both less than their respective original modeled short-term emission rates. The original modeling included emissions from the Cummins GTA28 engine which was used as an auxiliary engine at the facility. It was permitted to be used 500 hours per year. In order to present a worst case emission scenario for the facility, the engine's short-term emissions were used in the original modeling. The Cummins GTA28 engine was removed from the site. The emission reduction associated with the removal of the Cummins GTA28 engine compensates for the short-term emission rate increase associated with the proposed production increase.

C. NAAQS ANALYSIS

The removal of the Cummins GTA28 engine and the emission increases represents the only changes that would affect the modeling concentrations. Due to difference in the modeled emission rate of 35.2 lb/hr of NO_x and 22.51 lb/hr of CO and the proposed emission rate of 15.65 lb/hr of NO_x and 21.8 lb/hr of CO, it can be reasonably assumed that concentrations from the proposed emission rates would be well below both the annual NO_x NAAQS and the NO₂ Increment and the 1-hour and 8-hour modeling significance levels for CO.

Due to the insignificant impact of the CO and NO_x emissions, no further analysis was conducted.

D. PSD CONCENTRATION INCREMENT ANALYSIS

The Lindrith Compressor Station is located in an area designated as Class II and is, therefore, limited by the NO_x increment consumption limit of 25 ug/m³. The maximum predicted concentrations resulting from the proposed modifications will not consume the NO_x increment. No pollutants are subject to air quality analysis since the emission increase is less than PSD significance.

E. GROWTH ANALYSIS

The impact of the proposed project on residential, industrial, and commercial growth in the Lindrith area will be minimal as this project will not add any additional permanent employees after construction. Hence, there will be no impact on air quality in the area as a result of growth.

F. SOILS, VEGETATION, AND VISIBILITY

The insignificant impact of the criteria pollutants NO_x and CO will not affect soils and vegetation. The proposed modifications will increase emissions of NO_x, CO and VOC, but will not result in a significant deterioration of the air quality. In general, surface soils and natural vegetation can be expected to act as a sink for this atmospheric contaminant due to their inherent buffering qualities. A visibility analysis was not conducted as part of this project due to the fact that pollutant emission rates are being significantly reduced as a result of this project. Since the project will utilize pipeline-quality natural gas as a fuel, there will be little if any particulate matter emitted. Therefore, this project is not expected to have an adverse effect on existing visibility.

G. CLASS I AREA

A Class I Area (San Pedro Parks Wilderness) exists within 51

kilometers of the plant site. This proposed project represents a small increase in emissions of NO_x, CO, and VOCs. Consequently, the proposed project will have no adverse impact on this Class I area. The proposed modifications will actually mitigate the effects, if any, that the existing facility has on surrounding areas, resulting in better air quality.

H. ADDITIONAL IMPACT ANALYSIS (AIR TOXICS)

The applicant has identified a potential source of HAPs emissions from the proposed project: Formaldehyde emissions in engine exhaust (11.27 tpy).

CONCLUSION

The Air Permits Section of Region 6 of the U. S. Environmental Protection Agency has made a preliminary determination that approval of PSD-NM-1644-M-1 permit amendment be granted subject to the general and specific conditions attached. In the event of a discrepancy between provisions in the application for approval of emissions and this preliminary determination summary, the preliminary determination summary shall prevail.