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FEB 25 2021

Air Quality Bureau

February 24, 2021

New Mexico Environment Department Air Quality Bureau, Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87507-3313

Subject: NSR Significant Revision Permit Application for Permit #PSD-0285-R2, Prewitt Escalante Generating Station (PEGS)

To Whom it May Concern:

Attached please find two (2) hardcopies and two (2) electronic (CD) copies of the 20.2.72 NMAC Significant Permit Application for Tri-State Generation and Transmission Association, Inc (Tri-State) Prewitt Escalante Generating Station (PEGS). This letter is attached to the application copy that has the original notarized signature page (Section 22), along with an application submittal fee of \$500.

PEGS was a single unit coal-fired electric generating station owned and operated by Tri-State. With this significant revision permit application, Tri-State is removing all sources and permit conditions involving shutting down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill as of January 28, 2021. Additionally, Tri-State will transfer operation of the existing fly ash handling system to Salt River Materials Group prior to issuance of this permit modification. Salt River Materials Group will be submitting a new NSR minor source permit application to operate the existing fly ash handling system. This modification of the permit is based on completion of the two phases discussed in Air Quality Permit 0285-M4R2; Phase 1 the shutdown of the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower, and Phase 2 the transfer of the existing auxiliary boiler and water treatment plant to McKinley Paper Company and fly ash system to Salt River Materials Group.

Please let me know if you have any questions or need additional information.

Sincerely,

Paul Wade Principal Montrose Air Quality Services, LLC

Cc: Dan Salgado, Tri-State

AIR QUALITY PERMIT #0285-M4-R2 SIGNIFICANT REVISION APPLICATION

PREPARED FOR



PREWITT ESCALANTE GENERATING STATION Prewitt, New Mexico

Dated February 10, 2021

Prepared by

Montrose Air Quality Services, LLC



AIR QUALITY PERMIT #PSD-NM-285-M4-R3 SIGNIFICANT REVISION APPLICATION

PREPARED FOR



PREWITT ESCALANTE GENERATING STATION Prewitt, New Mexico

Dated February 11, 2021

Prepared by

Montrose Air Quality Services, LLC



Mail Application To:

New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505

Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb



For Department use only:

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FEB 25 2021

Air Quality Bureau

AIRS No.:

Universal Air Quality Permit Application

Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. See Section 1-1 for submittal instructions for other permits.

This application is submitted as (check all that apply): \Box Request for a No Permit Required Determination (no fee)
☐ Updating an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
Construction Status: Not Constructed Existing Permitted (or NOI) Facility Existing Non-permitted (or NOI) Facility
Minor Source: ☐ a NOI 20.2.73 NMAC X 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application
Title V Source: ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. TV Acid Rain: ☐ New ☐ Renewal
PSD Major Source: ☐ PSD major source (new) ☐ minor modification to a PSD source ☐ a PSD major modification
Acknowledgements:
X I acknowledge that a pre-application meeting is available to me upon request. Title V Operating, Title IV Acid Rain, and NPR
applications have no fees.
X \$500 NSR application Filing Fee enclosed OR The full permit fee associated with 10 fee points (required w/ streamline applications)
X Check No.: <u>4284152</u> in the amount of <u>\$500</u>
X I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched
(except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for
50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with
the Small Business Certification Form for your company.
☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not
qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business
certification form go to https://www.env.nm.gov/aqb/sbap/small_business_criteria.html).
Citation: Please provide the low level citation under which this application is being submitted: 20.2.72.200.A.(2) NMAC
(e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is
20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Sec	tion 1-A: Company Information	Al # if known (see 1st Updating 3 to 5 #s of permit IDEA ID No.): 911 R2				
1	Facility Name: Prewitt Escalante Generating Station	Plant primary SIC Cod	e (4 digits): 4911			
1		Plant NAIC code (6 digits): 221112				
a	Facility Street Address (If no facility street address, provide directions fro Prewitt, NM 87045 (West off of County Road 19, approx. 4 mi. N of I-40		: 297 County Road 19,			
2	Plant Operator Company Name: Tri-State Generation and Transmission Association, Inc.	Phone/Fax: (303) 452-	6111/(303) 254-6013			
a	Plant Operator Address: P.O. Box 33695, Denver CO 80233-0695					
b	Plant Operator's New Mexico Corporate ID or Tax ID: 02-346504-00-2					

3	Plant Owner(s) name(s): Tri-State Generation and Transmission Association, Inc.	Phone/Fax: (303) 452-6111/(303) 254-6013						
a	Plant Owner(s) Mailing Address(s): P.O. Box 33965, Denver CO 80233-0695							
4	Bill To (Company): Tri-State Generation and Transmission Association, Inc.	Phone/Fax: (303) 452-6111/(303) 254-6013						
a	Mailing Address: P.O. Box 33695, Denver CO 80233-0695	E-mail: dsalgado@tristategt.org						
5	☐ Preparer: X Consultant: Paul Wade, Montrose Air Quality Services, LLC	Phone/Fax: (505) 830-9680 ext 102/(505)830-9678						
a	Mailing Address: 3500 G Comanche Rd. NE, Albuquerque NM 87107	E-mail: pwade@montrose-env.com						
6	Plant Operator Contact: Brian Rychener	Phone/Fax: (505) 972-5200						
a	Address: P.O. Box 577, Prewitt NM 87045	E-mail: brychener@tristategt.org						
7	Air Permit Contact: Jennifer McCurdy	Title: Senior Engineer						
a	E-mail: jmccurdy@tristategt.org	Phone/Fax: (303) 254-3237/(303) 254-6013						
b	Mailing Address: P.O. Box 33695, Denver CO 80233-0695							
c	The designated Air permit Contact will receive all official correspondence	(i.e. letters, permits) from the Air Quality Bureau.						

Section 1-B: Current Facility Status

	tion 1 B. Current rucinty Status	
1.a	Has this facility already been constructed? X Yes □ No	1.b If yes to question 1.a, is it currently operating in New Mexico? X Yes □ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes X No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? X Yes □ No
3	Is the facility currently shut down? ☐ Yes X No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated s	since 1972? □ Yes X No
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMA□Yes □No X N/A	C) or the capacity increased since 8/31/1972?
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes X No	If yes, the permit No. is: P-012-R3 Cancelled 10/5/2020
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes X No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes X No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? X Yes □ No	If yes, the permit No. is: PSD-0285-M4R2
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes X No	If yes, the register No. is:

Section 1-C: Facility Input Capacity & Production Rate

1	What is the	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)									
a	Current Hourly: 0.1048*10^6 NG scf Daily: 2.514 * 10^6 NG scf Annually: 229.43*10^6 NG scf										
b	Proposed	Hourly: 0.1048*10^6 NG scf	Annually: 455.71*10^6 NG scf								
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)										
a	Current	Hourly: 99*10^6 Btu	Daily: 2,376 * 10^6 Btu Annually: 216,810*10^6 Btu								
b	Proposed	Hourly: 99*10^6 Btu	Daily: 2,376 * 10^6 Btu	Annually: 430,650*10^6 Btu							

Section 1-D: Facility Location Information

1	Section: 22- 27	Range: 12W	Township: 14N	County: McKinley		Elevation (ft): 6,890			
2	UTM Zone: Y	X 12 or □ 13		Datum: □ NAD 27 X NAD 83 □ WGS 84					
a	UTM E (in meter	rs, to nearest 10 meter	s): 764,895	UTM N (in meters, to nearest	10 meters): 3	3,923, 080			
b	AND Latitude ((deg., min., sec.):	35°, 24', 57.4" N	Longitude (deg., min., sec	:.): 108°, 4	l', 57.6" W			
3	Name and zip c	code of nearest Ne	ew Mexico town: Prewitt, 8	37045					
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From I-40 at Prewitt, NM, go north on County Road 19 approx. 4 miles. Turn west onto plant access road.								
5	The facility is 4 miles North of Prewitt, NM.								
6	Status of land a	t facility (check o	one): X Private \square Indian/Pr	ueblo 🗆 Federal BLM 🗆 Fe	ederal For	rest Service Other (specify)			
7				a ten (10) mile radius (20 perated: McKinley County,		B.2 NMAC) of the property dian Reservation			
8	20.2.72 NMAC applications only : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/aqb/modeling/class1 areas.html)? ☐ Yes X No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers:								
9	Name nearest C	Class I area: San F	Pedro Parks Wilderness Are	ea					
10	Shortest distance	ce (in km) from fa	acility boundary to the bour	ndary of the nearest Class I	area (to the	nearest 10 meters): 127.35 km			
11				ions (AO is defined as the pest residence, school or occu					
12	Method(s) used to delineate the Restricted Area: Area is fenced. "Pastricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing								
13	☐ Yes X No A portable statione location or	onary source is not that can be re-ins	ot a mobile source, such as talled at various locations,		e that can l lant that is	be installed permanently at moved to different job sites.			
14	If yes, what is t	he name and perr ermit to store con	nit number (if known) of the struction materials at the fa	ated parties on the same pro ne other facility? Salt River acility using Tri-State's exis will be identified as "Escal	Materials ting fly as	h system that will be			

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility maximum operating $(\frac{\text{hours}}{\text{day}})$: 24 $(\frac{\text{days}}{\text{week}})$:	7	$(\frac{\text{weeks}}{\text{year}})$: 52	(hours year): 8,760			
2	Facility's maximum daily operating schedule (if less than 24	$\frac{hours}{day}$)? Start:	□AM □PM	End:	□AM □PM		
3	Month and year of anticipated start of construction: NA						
4	Month and year of anticipated construction completion: NA						
5	Month and year of anticipated startup of new or modified facility: After Permit Issuance						
6	Will this facility operate at this site for more than one year?	X Yes □ No					

Section 1-F: Other Facility Information

	<u> </u>							
1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? Yes X No If yes, specify:							
a								
b	Is this application in response to any issue listed in 1-F, 1 o	or 1a above? ☐ Yes	X No If Y	es, provide the 1c & 1d info below:				
c	Document Title:	Date:	_	nent # (or nd paragraph #):				
d	Provide the required text to be inserted in this permit:							
2	Is air quality dispersion modeling or modeling waiver being	g submitted with this	applicatio	n? □ Yes □ No				
3	Does this facility require an "Air Toxics" permit under 20.2	2.72.400 NMAC & 2	0.2.72.502	, Tables A and/or B?				
4	Will this facility be a source of federal Hazardous Air Pollu	utants (HAP)? X Yes	□No					
a	If Yes, what type of source? \Box Major ($\Box \ge 10$ tpy of an OR X Minor (X < 10 tpy of an			tpy of any combination of HAPS) 25 tpy of any combination of HAPS)				
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? X Yes	s 🗆 No						
a	If yes, include the name of company providing commercial generating station Commercial power is purchased from a commercial utility site for the sole purpose of the user.	•	, -	.				

Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only)

1 ☐ I have filled out Section 18, "Addendum for Streamline Applications." **X** N/A (This is not a Streamline application.)

Section 1-H: Current Title V Information - Required for all applications from TV Sources (Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or

20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC):		Phone:			
a	R.O. Title:	R.O. e-mail:				
b	R. O. Address:					
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:			
a	A. R.O. Title:	A. R.O. e-mail:				
b	A. R. O. Address:					
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship):					
4	Name of Parent Company ("Parent Company" means the primary permitted wholly or in part.):	name of the organiza	ation that owns the company to be			
a	Address of Parent Company:					
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):					
6	Telephone numbers & names of the owners' agents and site contact	ts familiar with plan	nt operations:			

Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:

NOTE 1:

7

The nearest residence is approximately 1,000 meters from the PEGS facility boundary. The McKinley Paper Company, another industrial facility, is located adjacent to the PEGS facility.

Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (**NOI**), a 20.2.70 NMAC (**Title V**), a 20.2.72 NMAC (**NSR** minor source), or 20.2.74 NMAC (**PSD**) application package shall consist of the following:

Hard Copy Submittal Requirements:

- 1) One hard copy original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use numbered tab separators in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This <u>copy</u> should be printed in book form, 3-hole punched, and <u>must be double sided</u>. Note that this is in addition to the head-to-to 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, two CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

Electronic files sent by (check one):

\mathbf{X}	D/DVI	attached to	paper	application
--------------	-------	-------------	-------	-------------

X secure electronic transfer. Air Permit Con	tact Name_Jennifer McCurdy
	Emailimccurdy@tristategt.org
	Phone number <u>(303) 254-3237</u>

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.**

- 4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.
- 5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.
- 6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
 - a. one additional CD copy for US EPA,
 - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
 - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide

Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc,), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

- 3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The electronic file names shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the core permit number (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the section # (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the header information throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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Section 20: Other Relevant Information

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Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

					Manufact- urer's Rated	Requested Permitted	Date of Manufacture ²	Controlled by Unit #	Source Classi-	Achipuolis under 2.72.202 MMAC do not appr		
Unit Number ¹	Source Description	Make	Model #	Serial #	Capacity ³ (Specify Units)	Capacity ³ (Specify Units)	Date of Construction/ Reconstruction ²	Emissions vented to Stack #	fication Code (SCC)	For Each Piece of Equipment, Check One		Replacing Unit No.
S1 (E1)	Vehicle Travel on Paved Roads - Fly Ash Transport	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S2,3,4,6,8, 9 (E1)	Vehicle Travel on Paved Roads	NA	NA	NA	NA	NA	NA NA	1 NA	101002 01	 □ Existing (unchanged) □ New/Additional □ Replacement Unit X To Be Modified □ To be Replaced 		
S10,11,12, 14,18,20	Vehicle Travel on Unpaved Roads	NA	NA	NA	NA	NA	NA	10	101002 01	X Existing (unchanged)		
(E10) S13,17,19,	Vehicle Travel on	NA	NA	NA	NA	NA	NA NA	NA 13	101002	X Existing (unchanged)		
21 (E13)	Haul Roads	Heyl &			IVA	11/4	NA	NA	01	☐ To Be Modified ☐ To be Replaced ☐ Existing (unchanged) X To be Removed		
S22 (E22)	Train Unloading	Patterson	NA	NA						□ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S24 (E24)	Transfer Pt. (Conv 1 to Conv 2)	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		
S26 (E26)	Transfer Pt.(Conv 2 to Stacker)	B.L. Monague	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Removed □ Replacement Unit □ To be Replaced 		
S27,28 (E27)	Coal Pile Wind Erosion	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		
S29 (E29)	Coal Pile Maintenance	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Removed □ Replacement Unit □ To be Replaced 		
S30 (E30)	Coal Pile Reclaimer Transfer Point	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S31 (E30)	Coal Transfer (drop to Reclaimer and Conv 6A,B)	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		
S33 (E32)	Coal Crusher	American Pulverizer	WS- 58BG- DC	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		
S35 (E34)	Transfer Pt (Conv 7A,7B to 8A,8B)	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		

					Manufact- urer's Rated	Requested Permitted	Date of Manufacture ²	Controlled by Unit #	Source Classi-		RICE Ignition	
Unit Number ¹	Source Description	Make	Model #	Serial #	Capacity ³ (Specify Units)	Capacity ³ (Specify Units)	Date of Construction/ Reconstruction ²	Emissions vented to Stack #	fication Code (SCC)	For Each Piece of Equipment, Check One	Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
S37 (E34)	Transfer Pt. (Conn 8A&B to bunkers)	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		
S38 (E35)	TP Coal Bunkers to Weigh Belt	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S40 (E35)	TP Weigh belt to pulverizers	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S41 (E35)	Pulverizers	Combustion Engineering	863	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S47 (E38)	Limestone Truck Unloading	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S48 (E39)	Limestone Pile Wind Erosion	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S49 (E41)	Limestone Pile Maintenance	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S51A, S52A or S52B (E42)	Limestone Transfer Pt(reclaimer to conv L2)	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Removed □ Replacement Unit □ To be Replaced 		
S51B (E43)	Loader Limestone Pile to Limestone Hopper	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S56 (E47)	Limestone Transfer Pt. (Conv L2 to L3)	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S54 (E45)	Limestone Transfer Pt. (Conv L3 to L4)	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S58 (E49)	Limestone Transfer Pt. (Conv L4 to Silos)	Combustion Engineering (silo)	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S59, 60, 61, 69, 85 (E50)	Limestone Process Fugitives (Transfer Pt, ball mills, Conv S1)	Mine and Smelter (ball mills)	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		

					Manufact- urer's Rated	Requested Permitted	Date of Manufacture ²	Controlled by Unit #	Source Classi-		RICE Ignition	
Unit Number ¹	Source Description	Make	Model #	Serial #	Capacity ³ (Specify Units)	Capacity ³ (Specify Units)	Date of Construction/ Reconstruction ²	Emissions vented to Stack #	fication Code (SCC)	For Each Piece of Equipment, Check One	Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
S79 (E63)	Intermediate Pile Wind Erosion	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S80 (E63)	Area Around Intermediate Pile Wind Erosion	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S81 (E65)	Intermediate Pile Maintenance	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S82 (E65)	Sludge /Ash Truck Loading	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S83 (E67)	Fly Ash Silo (loading)	Allen- Sherman- Hoff (silo)	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S84a (E67a)	Existing Fly Ash Loadout (sold fly ash loading to trucks)	Midwest International Standards Product	MVL37T /388	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S84b (E67b)	Fly Ash Loadout (sold fly ash loading to trucks)	Industrial Accessores Company	TBD	TBD						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
\$86,87, 88, 89, 90, 91(E68)	Landfill Pile (truck unloading, erosion, maintenance)	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S92 (E74)	Cooling Tower Drift	Research Cottrell	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S94 (E75)	Soda Ash Silo Loading	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S95 (E75)	Soda Ash Silo Unloading	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S96 (E76)	Lime Silo Loading	NA	NA	NA						 □ Existing (unchanged) □ New/Additional □ To Be Modified □ To be Replaced 		

							edidine Generating Bi			ripplication Bate. I cordary	<u> </u>	
Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact- urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ² Date of Construction/ Reconstruction ²	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
S97 (E76)	Lime Silo Unloading	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S111 (E79)	Coal Fired Boiler	Combustion Engineering	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S112 (E80)	Auxiliary Boiler	ABCO	Fired D- Type	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S113 (E81)	Plant Heating Boiler	Henry Voight Machine Co.	NA	DT-113-85	99 MMBtu/hr	99 MM Btu/hr	1984 1984	NA 81	102006 03	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced		
S126 (E126)	Unleaded Gasoline Tank (WF-UNLD)	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S127 (E127)	Unleaded Gasoline Tank (UNLD)	NA	NA	NA	1,288 Gallons	1,288 Gallons	1984 1984	NA NA	403010 08	X Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S150 (E150)	T.P Bottom Ash Conveyor S-4 to Waste Pile	NA	NA	NA						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
S151 (E151)	Emergency Fire Pump	Detroit Diesel	DDFP- 06AT700 6	6A-420213						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) **OR** Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/apb/permit/apb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at https://www.env.nm.gov/air-quality/air-quality-title-v-

operating-permits-guidance-page/. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check Onc
Omt Number	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	For Each Fiece of Equipment, Check Onc
S114/E82	Emergency Generator	Detroit Diesel	7123-7305 (Series V71)	4.225	20.2.72.202.B.3	1984	X Existing (unchanged) To be Removed Replacement Unit
3114/1202	Emergency Generator	Detroit Dieser	NA	MMBtu/hr	IA #7	1984	□ To Be Modified □ To be Replaced
S116	Fuel Oil Tank	NA	NA	23.8	20.2.72.202.B.2.a	1984	X Existing (unchanged)
3110	(IFO/TNK170)	NA.	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S118	Plant Drain Used Oil	NA	NA	102	20.2.72.202.B.2.a	1984	X Existing (unchanged) To be Removed Replacement Unit
	(PDO-WO)	·	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S119	Water Treatment Used Oil (WT-WO)						□ Existing (unchanged) X To be Removed □ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced
6120	Power House Used Oil	N/A	NA	6.6	20.2.72.202.B.2.a	1984	X Existing (unchanged)
S120	(PB-WO)	NA	NA	bbl	IA #5	1984	□ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced
S121	Scrubber Building Used Oil	NA	NA	22.4	20.2.72.202.B.2.a	1984	X Existing (unchanged)
3121	(SB-WO)	NA.	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S122	Vehicile Maintenance	NA	NA	18.5	20.2.72.202.B.2.a	1984	X Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit
	Used Oil (VM-WO)		NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S123	Coal Unloading Used Oil	NA	NA	3.5	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
5125	(CD-WO)		NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S124	Oil-Water Separator	NA	NA	155	20.2.72.202.B.2.a	1984	X Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit
	Used Oil (MAIN-WO)		NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
S125	Antifreeze Tank	NA	NA	13	20.2.72.202.B.2.a	1984	X Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit
			NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
CHFOTNK	Coal Handling Fuel Oil	NA	NA	357	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
	Tank		NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
TAMOTNK	Transformer Area	NA	NA	961	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
	Mineral Oil Tanks	•	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced

Unit Number	Samuel Description	M64	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Fool Photo of Francisco and Charle One
Unit Number	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	For Each Piece of Equipment, Check Onc
PBLOTNK	Power Block Lubricating	NA	NA	406	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
FBLOTINK	Oil Tanks	INA	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
Portable tanks	Equipment Lube, Hydralic Oil Reservoirs,	NA	NA	various	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
Fortable talks	Mineral Oil, boxes, tanks, delivery systems	NA	NA	NA	IA #5	1984	☐ To Be Modified ☐ To be Replaced
Egen Fuel Tank	Fuel Tank	NA	NA	7.1	20.2.72.202.B.2.a	1984	X Existing (unchanged) □ To be Removed □ New/Additional □ Replacement Unit
Egen Puer Tank	ruei rank	NA	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced
Scrubber Bldg Used oil	55-Gal Drums - 9	NA	NA	11.7	20.2.72.202.B.2.a	1984	X Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit
Tank	55-Gai Diuliis - 9	IVA	NA	bbl	IA #5	1984	☐ To Be Modified ☐ To be Replaced

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Table 2-C: Emissions Control Equipment

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) ¹	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
1	Water Flush/Water Flush/Sweep	NA	PM	\$2,3,4,6,8,9	29	Note C1
10	Watering	NA	PM	S10,11,12,14,18,20	28.7	Note C1
13	Watering/Chemical Supression	NA	PM	S13,17,19,21	91.4	Note C1
1 List each co	ntrol device on a separate line. For each control device, list all en	nission units c	controlled by the control device.	•		

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Table 2-D: Maximum Emissions (under normal operating conditions)

X This Table was intentionally left blank because it would be identical to Table 2-E.

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NO	Ox	C	О	V	OC	S	Ox	P	\mathbf{M}^1	PM	[10 ¹	PM	(2.5^1)	Н	$_{2}S$	Le	ead
Unit No.	lb/hr	ton/yr		ton/yr		ton/yr	lb/hr	ton/yr	lb/hr	ton/yr								
Totals																		

¹Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Form Revision: 6/14/2019 Table 2-D: Page 1 Printed 2/24/2021 9:05 AM

Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E⁻⁴).

Unit No.	N	Ox	C	0	V(OC	SO	Ox	PI	M^1	PM	[10 ¹	PM	2.5 ¹	Н	$_2$ S	Le	ead
Omt No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr										
E1	-	-	1	-	-	-	1	-	0.61	2.58	0.12	0.52	0.030	0.13	-	-	1	-
E10	-	-	-	-	-	-	-	-	9.1	33	2.3	8.6	0.23	0.86	-	-	1	-
E13	-	-	-	-	-	-	-	-	3.2	12	0.90	3.3	0.090	0.33	-	-	-	-
E81	11	23	8.8	19.1	0.58	1.25	0.063	0.14	0.80	1.73	0.80	1.73	0.80	1.73	-	-	-	-
E127	-	-	-	-	0.053	0.23	-	-	-	-	-	-	-	-	-	-	1	-
Total After Phase 1 and Phase 2 Equipment (1)	11	23	8.8	19.1	0.63	1.48	0.063	0.14	13.7	49.3	4.12	14.2	1.15	3.1	-	-	-	-

¹ Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

^{(1):} Emission rate totals after completion of both Phase 1 and Phase 2.

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

X This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scehduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance (SSM)¹, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.env.nm.gov/aqb/permit/aqb_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NO			O)C)x	PI	M^2	PM	10^2	PM	2.5^2	Н	I_2S	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
With the shut	tdown of th	e coal-fired	d boiler (E	79) there is	no SSM ei	nissions pr	oposed for	this applic	ation.						-			
Totals																		

¹ For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

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² Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

X I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the "-" symbol and on significant figures.

	Serving Unit	N	Ox	C	0	V	OC	SO	Ox	P	М	PM	110	PM	12.5	□ H ₂ S or	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
,	Totals:																

Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack	Serving Unit Number(s)	Orientation	Rain Caps	Height Above	Temp.	Flow	Rate	Moisture by	Velocity	Inside
Number	from Table 2-A	(H-Horizontal V=Vertical)	(Yes or No)	Ground (ft)	(F)	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
81	S113(E81)	V	N	215	525	691	252	11	55	4.00

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

Stack No.	Unit No.(s)	Total	HAPs	Hex X HAP o	cane or 🗆 TAP	Provide I Name			Pollutant Here or 🛭 TAP		Pollutant Here or TAP	Name	Pollutant Here or 🗆 TAP	Name		Name	Pollutant e Here or 🗌 TAP	Provide Name Here HAP or	
		lb/hr	ton/yr		ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
81	E81	0.20	0.43	0.19	0.41														

Form Revision: 10/9/2014 Table 2-I: Page 1 Printed 2/24/2021 9:05 AM

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

	Fuel Type (low sulfur Diesel,	Fuel Source: purchased commercial,		Speci	fy Units		
Unit No.	ultra low sulfur diesel, Natural Gas, Coal,)	pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
E81	Natural Gas/ Propane	pipeline quality natural gas/ purchased commercial	945 Btu/scf/ 91.5 MMBtu/1000 gallons	104,762 scf/ 1082 gallons	455.7 million scf/ 4706600 gallons	0	0

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Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

					Vapor	Average Stor	age Conditions	Max Storag	ge Conditions
Tank No.	o. SCC Code Material Name Composition		Liquid Density (lb/gal)	Molecular Weight (lb/lb*mol)	Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)	
WF- Diesel		Red Diesel	Red Diesel	7.05	130	58	0.0072	66	0.0092
MH-Diesel		Diesel	Diesel	7.05	130	58	0.0072	66	0.0092
UNLD		Unleaded Gasoline	Unleaded Gasoline	5.1	66	58	5.0402	66	5.7809
WF- Diesel		Diesel	Diesel	7.05	130	58	0.0072	66	0.0092
VF- Diesel		Diesel	Diesel	7.05	130	58	0.0072	66	0.0092
SRG - Diesel		Diesel	Diesel	7.05	130	58	0.0072	66	0.0092
		_							

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Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2	Roof Type (refer to Table 2-LR below)	Сар	acity	Diameter (M)	Vapor Space	Co (from Ta	blor lble VI-C)	Paint Condition (from Table	Annual Throughput	Turn- overs
			LR below)	LK below)	(bbl)	(M^3)	1	(M)		Shell	VI-C)	(gal/yr)	(per year)
WF- Diesel	2012	Red Diesel	FX	NA	381.0	45.0	2.9	0.34	Tan	Tan	Good	64,000	4
MH-Diesel	2012	Diesel	FX	NA	476.0	56.5	3.4	0.34	Tan	Tan	Good	80,000	4
UNLD	2012	Unleaded Gasoline	FX	NA	30.7	3.7	1.22	0.18	WH	WH	Good	15,500	12
WF- Diesel	1984	Diesel	FX	NA	33.0	4.0	1.68	0.14	WH	WH	Good	8,300	6
VF- Diesel	1984	Diesel	FX	NA	31.7	3.8	1.52	0.14	WH	WH	Good	8,000	6
SRG - Diesel	1984	Diesel	FX	NA	31.7	3.8	1.52	0.14	WH	WH	Good	8,000	6

Table 2-L2: Liquid Storage Tank Data Codes Reference Table

Roof Type	Seal Type, We	elded Tank Seal Type	Seal Type, Rive	Roof, Shell Color	Paint Condition	
FX: Fixed Roof	Mechanical Shoe Seal	Mechanical Shoe Seal Liquid-mounted resilient seal		Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	
Note: $1.00 \text{ bbl} = 0.159 \text{ M}$	3 = 42.0 gal				BL: Black	
					OT: Other (specify)	

Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

	Materi	al Processed	Material Produced				
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)

Table 2-N: CEM Equipment

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
NA									

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Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
NA								

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box \Box By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO ₂ ton/yr	N ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr²					Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs ¹	1	298	25	22,800	footnote 3						
	mass GHG	25169	0.047	0.47							25,170	
81	CO ₂ e	25169	14.1	11.9								25,195
	mass GHG											
	CO ₂ e											
	mass GHG											
	CO ₂ e											
	mass GHG											
	CO ₂ e											
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	mass GHG											
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	mass GHG											
	CO ₂ e											
	mass GHG											
	CO ₂ e											
	mass GHG CO ₂ e											
	mass GHG											
	CO ₂ e											
	mass GHG	25169	0.047	0.47							25,170	
Total	CO ₂ e	25169	14.1	11.9							23,170	25,195

TGWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

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² For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

³ For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

⁴ Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

⁵ CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

The <u>Application Summary</u> shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, debottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The <u>Process Summary</u> shall include a brief description of the facility and its processes.

Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

The Prewitt Escalante Generating Station (PEGS) was permitted as a nominal 273-megawatt single unit coal-fired electric generating station owned and operated by Tri-State Generation and Transmission Association, Inc (Tri-State). PEGS is located at UTM Zone 12, UTM Easting 764.96 km, UTM Northing 3922.88 km, NAD 83, in Township 14N, Range 12W, Sections 22-27, 4 miles north of Prewitt, New Mexico in McKinley County (see Figure 8-2). PEGS operates under NSR Permit #0285-M4R3 issued December 11, 2020. Title V Operating Permit #P012-R3 issued February 24, 2017 was cancelled on October 5, 2020 with the shutdown of the coal-fired boiler.

Tri-State is submitting a significant revision to NSR Permit #0285-M4R3 per 20.2.72.200.A.2 NMAC for PEGS. Tri-State has permanently shut down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower as of August 31, 2020. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill on January 28, 2021. Additionally, Tri-State will be transferring operation of the fly ash system (S1 of E1, E67, E67A, E67B) to Salt River Materials Group (SRMG). SRMG purchased fly ash material from Tri-State's PEGS for resale to their construction materials clients until the coal-fired boiler shutdown as of August 31, 2020. SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials.

In addition, Tri-State is requesting to increase the allowable hours of operation of the plant heating boiler to ensure that pipes and other equipment don't freeze in the winter months. Presently, the plant heating boiler, Unit E81, is allowed to operate 2190 hours per year. They are requesting an increase to 4350 hours per year. Tri-State is also requesting that the plant heating boiler be allowed to combust either natural gas or propane. To determine which fuel would produce the highest emission, emission rates were calculated for both natural gas and propane. These calculations are found in Section 6.

Table 3-1 lists the present emission units permitted under NSR Permit #0285-M4R2. Column 3 – 5 presents each emission sources status through Phases 1 and 2. Column 3 lists the emission units that will remain after this significant permit revision. Column 4 lists the emission units that were removed during Phase 1 of this significant permit revision. Column 5 lists the emission units that will be removed during Phase 2 of this significant permit revision.

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TABLE 3-1: List of Existing Equipment and Status after Phase 1 and Phase 2

Unit No.	Description	Remain	Phase 1	Phase 2
E1	Vehicle Travel on Paved Roads (S1) Fly Ash Transport			X
E1	Vehicle Travel on Paved Roads (S2-4, 6, 8, 9)	X		
E10	Vehicle Travel on Unpaved Roads (S10-12, 14, 18, 20)	X		
E13	Vehicle Travel on Haul Roads (S13, 17, 19, 21)	X		
E22	Train Unloading (S22)		X	
E24	Transfer Pt. (Conv 1 to Conv 2) (S24)		X	
E26	Transfer Pt.(Conv 2 to Stacker) (S26)		X	
E27	Coal Pile Wind Erosion (S27, 28)			X
E29	Coal Pile Maintenance (S29)			X
E30	Coal Transfer (Coal Pile Reclaimer Transfer Point, drop to Reclaimer and Conv 6A,B) (S30, 31)		X	
E32	Coal Crusher (S33)		X	
E34	Transfer Pt (Conv 7A,7B to 8A,8B to bunkers) (S35, 37)		X	
E35	TP Coal Bunkers (S38) to Weigh Belt(S40) to pulverizers (S41)		X	
E38	Limestone Truck Unloading(S47)		X	
E39	Limestone Pile Wind Erosion(S48)			X
E41	Limestone Pile Maintenance (S49, S50)			X
E42	Limestone Transfer Pt(reclaimer to conv L2)(S51A, S52A or S52B)		X	
E43	Loader Limestone Pile to Limestone Hopper(S51B)		X	
E45	Limestone Transfer Pt. (Conv L2 to L3)(S54)		X	
E47	Limestone Transfer Pt. (Conv L3 to L4)(S56)		X	
E49	Limestone Transfer Pt. (Conv L4 to Silos)(S58)		X	
E50	Limestone Process Fugitives (Transfer Pt, ball mills, Conv S1)(S59, 60, 61, 69, 85)		X	
E63	Intermediate Pile Wind Erosion (S79) and Area around Intermediate Pile Wind Erosion (S80)			X
E65	Intermediate Pile Maintenance (S81) and Sludge/Ash Truck Loading (S82)			X
E67	Fly Ash Silo Loading (S83)			X
E67a	Existing Fly Ash Loadout (sold fly ash loading to trucks) (S84a)			X
E67b	Fly Ash Loadout (sold fly ash loading to trucks) (S84b)			X
E68	Landfill Pile Operation (truck unloading, erosion, maintenance) (S86-S91)			X
E74	Cooling Tower Drift (S92)		X	
E75	Soda Ash Silo Loading (S94) and Unloading (S95)			X
E76	Lime Silo Loading (S96) and Unloading (S97)			X
E79	Main Boiler, Coal Fired (S111)		X	
E80	Auxiliary Boiler, NG Fired (S112)			X
E81	Plant Heating Boiler, NG or Propane Fired (S113)	X		
E126	Unleaded Gasoline Tank (WF-UNLD) (S126)		X	
E127	Unleaded Gasoline Tank (UNLD) (S127)	X		
E150	T.P Bottom Ash Conveyor S-4 to Waste Pile (S150)		X	
E151	Emergency Fire Pump Engine (S151)			X

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The change in pollutant emission rates for this significant revision after completion of Phases 1 and 2 to NSR Permit #0285-M4R2 is summarized in Table 3-2.

TABLE 3-2: Facility Emission Limits after Completion of Phases 1 and 2

	Present Permit Emissions	Facility Emissions Totals	Reduction in Emissions
Pollutant	TPY	After Phases 1 and 2 TPY	After Phases 1 and 2 TPY
NOx	4,919	23	4,888
CO	749	19.1	729.9
VOC	40	1.48	37.4
SO_2	2,165	0.14	2,164.9
PM	347	49.3	297.7
PM_{10}	254	14.2	239.8
PM _{2.5}	227	3.1	223.9
HAPs	32	0.43	31.6
State TAPs	<0.5	< 0.01	< 0.5
Fluorides	10.9	0	10.9
Lead	0.25	< 0.0001	0.25
Sulfur compounds	1.1	0	1.1
GHG	2,363,891	25,195	2,338,696

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The following discussion presents a summary of application section changed in this significant revision application.

Section 1	No change in site or contact information in this significant permit revision
Table 2-A	Updated equipment status of emission units after completion of Phases 1 and 2
Table 2-B	Unchanged from previous permit applications
Table 2-C	Remain emission control equipment after completion of Phases 1 and 2
Table 2-D	Left blank since no change in permitted emission rates
Table 2-E	Lists emission rates after completion of Phase 1 and Phase 2, includes increase in hours of operation for the plant heating boiler (Unit E81)
Table 2-F	Unchanged from previous permit application
Table 2-G	Unchanged from previous permit application
Table 2-H	Stack parameters after completion of Phases 1 and 2
Table 2-I	HAPS emission rates after completion of Phases 1 and 2, includes increase in hours of operation for the plant heating boiler (Unit E81)
Table 2-J	Fuel usage parameters after completion of Phases 1 and 2, includes increase in hours of operation for the plant heating boiler (Unit E81)
Table 2-K	Storage tank parameters after completion of Phases 1 and 2
Table 2-L	Storage tank parameters after completion of Phases 1 and 2
Table 2-M	Removed materials processed and produced after completion of Phase 1
Table 2-N	CEM equipment update after completion of Phases 1 and 2
Table 2-O	Parametric emission measurement equipment after completion of Phase 1
Table 2-P	GHG emission rates after completion of Phases 1 and 2, includes increase in hours of operation for the plant heating boiler (Unit E81)
Section 3	Included in permit application
Section 4	No change in process flow diagrams from previous permits - not included in this application
Section 5	No change in emission source location from previous permits - not included in this application
Section 6	Includes increase in hours of operation for the plant heating boiler (Unit E81) for annual emission rate. Increase hours of operation from 2190 to 4350 hours per year.
Section 7	Since no change in unit emission rates this section is not include in this application
Section 8	Unchanged from previous permit applications
Section 9	Presents public notice documents for this significant permit application
Section 10	Routine operations of the facility will remain unchanged until completion of Phases 1 and 2
Section 11	No change in source determination from previous permits
Section 12	Presents PSD status after completion of Phases 1 and 2
Section 13	Presents status of air quality regulations after completion of Phases 1 and 2

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Section 14	No change in operational plans from previous permits - not included in this application
Section 15	Discussion on alternative operating scenarios requested in this permit application
Section 16	No change in dispersion modeling from previous permits - not included in this application
Section 17	Compliance test history is up to date - not included in this application
Section 18	Not a streamline application - not included in this application
Section 19	Not a Title V application - not included in this application
Section 20	Discussion on other relevant information
Section 21	Not a landfill application - not included in this application
Section 22	Included in permit application

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Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

.....

No process flow diagrams are included in this significant permit revision since there has been no change in the operations of all remaining emission source equipment.

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Section 5

Plot Plan Drawn To Scale

A <u>plot plan drawn to scale</u> showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

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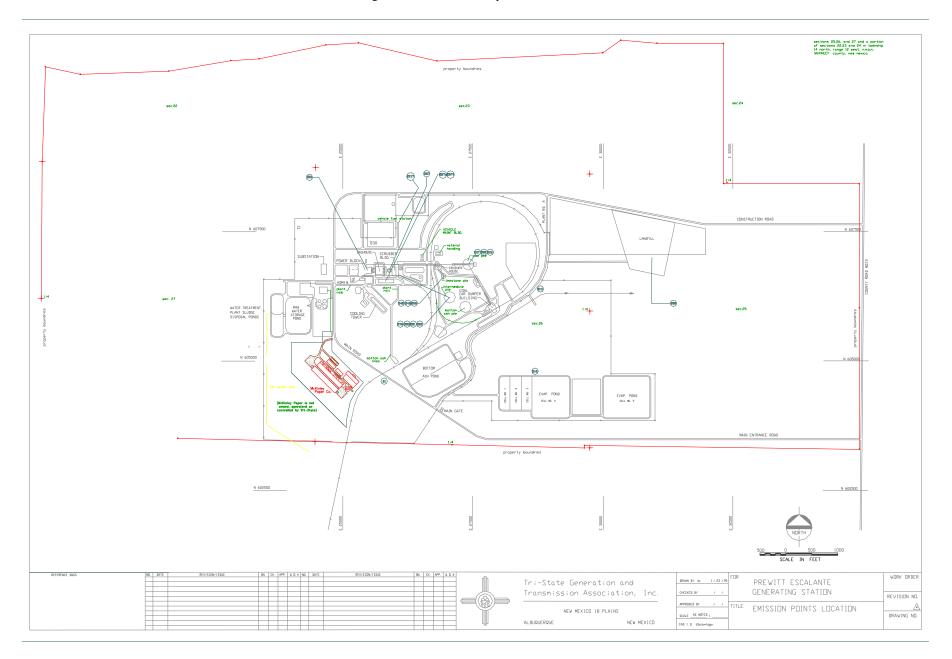


Figure 5-1: Location of Emission Sources with this Permit Revision

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Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

- 1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
- 2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

- **A.** All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.
- **B.** At least 5 significant figures shall be retained in all intermediate calculations.
- **C.** In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:
 - (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
 - (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; and
 - (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
 - (4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the

application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Increase in the hours of operation and the use of either natural gas or propane for the plant heating boiler (Unit E81) is included below. The plant heating boiler will increase hours of operation from 2190 hours to 4350 hours per year. The fuel will either be natural gas or propane. There will be no change in permitted emission rates for the all other emission units that remain after Phases 1 and 2 for this significant revision application. There is no additional equipment proposed in the significant revision application.

Plant Heating Boiler				(S113)	[E81]
Hours per year	4350	hour/year			
Heat Input	99	MMBtu/hr			
Heat Input	430650	MMBtu/yr			
Natural Gas Usage	0.104762	MMscf/hr	945	Btu/scf	
Natural Gas Usage	455.7147	MMscf/yr			
Propane Gas Usage	1.081967	1000 gal/hr	91.5	MMBtu/1000	gallons
Propane Gas Usage	4706.6	1000 gal/year			

AP-42 Section 1.4 Natural Gas Utility Boilers >100 MMbtu/hr input.

		lb/million cu. ft. gas
PM ₁₀ (filterable)	1.9	(filterable)
PM ₁₀ (total)	7.6	lb/million cu. ft. gas (filterable plus condensable)
NOx 1	100	lbs/million cu. ft. gas (conservatively assuming non-low-NOx boiler)
CO	84	lb/million cu. ft. gas
SO_2	0.6	lb/million cu. ft. gas
VOC	5.5	lb/million cu. ft. gas

AP-42 Section 1.5 Propane Emission Factors - Industrial Boilers.

PM ₁₀ (filterable)	0.2	lb/10 ³ gal (filterable)
PM ₁₀ (total)	0.7	lb/10 ³ gal (filterable plus condensable)
NOx	13	$lb/10^3$ gal
CO	7.5	$1b/10^3$ gal
SO_2	0.10S	$1b/10^3$ gal $S = Sulfur Content = 0.54 gr/100 ft3$
SO_2	0.054	$lb/10^3$ gal
VOC	1	$lb/10^3$ gal

Natural Gas Emissions

Fuel Usage	0.104762	million cu. ft. gas/hr
PM10 = TSP = PM2.5		
PM ₁₀ (filterable)	0.20	lbs/hr
	0.43	tons/yr
PM ₁₀ (total)	0.80	lbs/hr
	1.73	tons/yr

NOx 10.5 lbs/hr 22.8 tons/yr

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TD . C.	$\alpha \circ \pi$	
Tri_State	(+X7 1	Association
III-State	OG.I	Association

19.1 tons/yr	СО	8.80	lbs/hr	
NOC 1.25 10s/yr		19.1	tons/yr	
No	SO_2	0.063	lbs/hr	
1.25 tons/yr		0.14	tons/yr	
Propane Emissions Fuel Usage	VOC	0.58	lbs/hr	
PM10 = TSP = PM2.5 PM10 (filterable) 0.22 lbs/hr 0.47 tons/yr		1.25	tons/yr	
PM10 = TSP = PM2.5 PM₁₀ (filterable) 0.22 lbs/hr tons/yr PM₁₀ (total) 0.76 lbs/hr 1.65 tons/yr NOx 14.1 lbs/hr 30.6 tons/yr CO 8.11 lbs/hr 17.65 tons/yr SO₂ 0.058 lbs/hr 0.13 tons/yr VOC 1.08 lbs/hr 2.35 tons/yr Maximum Allowable Emission Rates PM10 = TSP = PM2.5 PM₁₀ (filterable) 0.22 lbs/hr 0.47 tons/yr Propane 0.47 tons/yr PM₁₀ (total) 0.80 lbs/hr 0.47 tons/yr Natural Gas 1.73 tons/yr NOx 14.1 lbs/hr 30.6 tons/yr Propane 30.6 tons/yr CO 8.80 lbs/hr 1.73 tons/yr Natural Gas 1.91 tons/yr SO₂ 0.063 lbs/hr 1.73 tons/yr Natural Gas 1.74 tons/yr VOC 1.08 lbs/hr 1.75 tons/yr Natural Gas 1.75 tons/yr	Propane Emissions			
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PM10 (total)	PM10 = TSP = PM2.5			
PM10 (total)	PM ₁₀ (filterable)	0.22		
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NOx	PM ₁₀ (total)	0.76	lbs/hr	
30.6 tons/yr		1.65	tons/yr	
CO	NOx	14.1	lbs/hr	
17.65 tons/yr		30.6	tons/yr	
Not	СО	8.11	lbs/hr	
NOC 1.08 lbs/hr 2.35 tons/yr		17.65	tons/yr	
NOC 1.08 lbs/hr 2.35 tons/yr	SO ₂	0.058	lbs/hr	
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NOx 14.1 lbs/hr 30.6 tons/yr Propane CO 8.80 lbs/hr tons/yr Natural Gas lbs/hr tons/yr SO2 0.063 lbs/hr tons/yr Natural Gas lbs/hr tons/yr VOC 1.08 lbs/hr Propane	PM ₁₀ (total)	0.80	lbs/hr	Natural Gas
30.6 tons/yr 1				
30.6 tons/yr 1	NOx	14.1	lbs/hr	Propane
				Tropune
	CO	8 80	lbs/hr	Natural Gas
VOC 1.08 lbs/hr Propane				Tutului Gus
VOC 1.08 lbs/hr Propane	so.	0.062	lbs/br	Notural Cas
VOC 1.08 lbs/hr Propane	502			rvaturai Gas
<u>.</u>			-	
z.ss tons/yr	VOC			Propane
		2.33	10115/ y1	

HAPS	AP-42 Section	1.4 Natural Gas
Fuel Usage	0.104762	million cu. ft. gas/hr

i dei Osage	0.104702	minion cu. it.	543/111
HAPs	Emission Factor Ibs/million cu. ft. gas	Emissions lb/hr	Emissions tpy
SPECIA	TED ORGANIC COM	IPOUNDS	
Benzene	2.10E-03	0.00022	0.00048
Formaldehyde	7.50E-02	0.00786	0.01709
Hexane	1.80E+00	0.18857	0.41014
Naphthalene	6.10E-04	0.00006	0.00014
Toluene	3.40E-03	0.00036	0.00077
	METALS		
Arsenic	2.00E-04	0.00002	0.00005
Beryllium	1.20E-05	0.00000	0.00000
Cadmium	1.10E-03	0.00012	0.00025
Chromium	1.40E-03	0.00015	0.00032
Cobalt	8.40E-05	0.00001	0.00002
Lead	5.00E-04	0.00005	0.00011
Manganese	3.80E-04	0.00004	0.00009
Mercury	2.60E-04	0.00003	0.00006
Nickel	2.10E-03	0.00022	0.00048
Selenium	2.40E-05	0.00000	0.00001
		0.19770	0.43001
TAPs	Emission Factor lbs/million	Emissions lb/hr	Emissions tpy
Danimus	cu. ft. gas	0.00046	0.00100

TAPs	Emission Factor lbs/million cu. ft. gas	Emissions lb/hr	Emissions tpy
Barium	4.40E-03	0.00046	0.00100
Copper	8.50E-04	0.00009	0.00019
Molybdenum	1.10E-03	0.00012	0.00025
Vanadium	2.30E-03	0.00024	0.00052
Zinc	2.90E-02	0.00304	0.00661
		0.00394	0.00858

GHG Emissions

Plant Heating Boiler CO2 Combustion

New Mexico Green House Gas Mandatory Emission Inventory Emissions Quantification Procedures for 20.2.73 NMAC and 20.2.87 NMAC, Emissions Year: 2010." "40 CFR Part 98, Subpart D." Equation C-1b for CO2 for natural gas, Equation C-10 for Methane and Nitrous Oxide for natural gas.

	Emission Factor kg/MMBtu gas	Emissions lb/hr	Emissions tpy
CO2	53.02	11572	25169
Methane	0.001	0.22	0.47
N20	0.0001	0.022	0.047
		11572	25170
CO2e (CO2*1)		11572	25169
CO2e (Methane*25)		5.5	11.9
CO2e (N20*298)	_	6.5	14.1
	CO2e Total	11584	25195

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (CO_2), methane (CO_3), methane (CO_3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (CO_3).

Calculating GHG Emissions:

- 1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e emissions from your facility.
- **2.** GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO₂e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
- 3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
- **4.** Report GHG mass and GHG CO₂e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
- **5.** All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
- **6.** For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following \Box By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- 40 CFR 98 <u>Mandatory Green House Gas Reporting</u> except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. (20.2.70.7 NMAC, 20.2.74.7 NMAC). You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 <u>Mandatory Greenhouse Reporting</u> requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used To Determine Emissions

<u>Information Used to Determine Emissions</u> shall include the following:

- ☐ If manufacturer data are used, include specifications for emissions units <u>and</u> control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- **X** If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- ☐ If an older version of AP-42 is used, include a complete copy of the section.
- ☐ If an EPA document or other material is referenced, include a complete copy.
- \square Fuel specifications sheet.
- □ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

Plant Heating Boiler AP-42 Section 1.4 Plant Heating Boiler AP-42 Section 1.5

1.4 Natural Gas Combustion

1.4.1 General¹⁻²

Natural gas is one of the major combustion fuels used throughout the country. It is mainly used to generate industrial and utility electric power, produce industrial process steam and heat, and heat residential and commercial space. Natural gas consists of a high percentage of methane (generally above 85 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). The average gross heating value of natural gas is approximately 1,020 British thermal units per standard cubic foot (Btu/scf), usually varying from 950 to 1,050 Btu/scf.

1.4.2 Firing Practices³⁻⁵

There are three major types of boilers used for natural gas combustion in commercial, industrial, and utility applications: watertube, firetube, and cast iron. Watertube boilers are designed to pass water through the inside of heat transfer tubes while the outside of the tubes is heated by direct contact with the hot combustion gases and through radiant heat transfer. The watertube design is the most common in utility and large industrial boilers. Watertube boilers are used for a variety of applications, ranging from providing large amounts of process steam, to providing hot water or steam for space heating, to generating high-temperature, high-pressure steam for producing electricity. Furthermore, watertube boilers can be distinguished either as field erected units or packaged units.

Field erected boilers are boilers that are constructed on site and comprise the larger sized watertube boilers. Generally, boilers with heat input levels greater than 100 MMBtu/hr, are field erected. Field erected units usually have multiple burners and, given the customized nature of their construction, also have greater operational flexibility and NO_x control options. Field erected units can also be further categorized as wall-fired or tangential-fired. Wall-fired units are characterized by multiple individual burners located on a single wall or on opposing walls of the furnace while tangential units have several rows of air and fuel nozzles located in each of the four corners of the boiler.

Package units are constructed off-site and shipped to the location where they are needed. While the heat input levels of packaged units may range up to 250 MMBtu/hr, the physical size of these units are constrained by shipping considerations and generally have heat input levels less than 100 MMBtu/hr. Packaged units are always wall-fired units with one or more individual burners. Given the size limitations imposed on packaged boilers, they have limited operational flexibility and cannot feasibly incorporate some NO_x control options.

Firetube boilers are designed such that the hot combustion gases flow through tubes, which heat the water circulating outside of the tubes. These boilers are used primarily for space heating systems, industrial process steam, and portable power boilers. Firetube boilers are almost exclusively packaged units. The two major types of firetube units are Scotch Marine boilers and the older firebox boilers. In cast iron boilers, as in firetube boilers, the hot gases are contained inside the tubes and the water being heated circulates outside the tubes. However, the units are constructed of cast iron rather than steel. Virtually all cast iron boilers are constructed as package boilers. These boilers are used to produce either low-pressure steam or hot water, and are most commonly used in small commercial applications.

Natural gas is also combusted in residential boilers and furnaces. Residential boilers and furnaces generally resemble firetube boilers with flue gas traveling through several channels or tubes with water or air circulated outside the channels or tubes.

1.4.3 Emissions³⁻⁴

The emissions from natural gas-fired boilers and furnaces include nitrogen oxides (NO_x) , carbon monoxide (CO), and carbon dioxide (CO_2) , methane (CH_4) , nitrous oxide (N_2O) , volatile organic compounds (VOCs), trace amounts of sulfur dioxide (SO_2) , and particulate matter (PM).

Nitrogen Oxides -

Nitrogen oxides formation occurs by three fundamentally different mechanisms. The principal mechanism of NO_x formation in natural gas combustion is thermal NO_x . The thermal NO_x mechanism occurs through the thermal dissociation and subsequent reaction of nitrogen (N_2) and oxygen (O_2) molecules in the combustion air. Most NO_x formed through the thermal NO_x mechanism occurs in the high temperature flame zone near the burners. The formation of thermal NO_x is affected by three furnace-zone factors: (1) oxygen concentration, (2) peak temperature, and (3) time of exposure at peak temperature. As these three factors increase, NO_x emission levels increase. The emission trends due to changes in these factors are fairly consistent for all types of natural gas-fired boilers and furnaces. Emission levels vary considerably with the type and size of combustor and with operating conditions (e.g., combustion air temperature, volumetric heat release rate, load, and excess oxygen level).

The second mechanism of NO_x formation, called prompt NO_x , occurs through early reactions of nitrogen molecules in the combustion air and hydrocarbon radicals from the fuel. Prompt NO_x reactions occur within the flame and are usually negligible when compared to the amount of NO_x formed through the thermal NO_x mechanism. However, prompt NO_x levels may become significant with ultra-low- NO_x burners.

The third mechanism of NO_x formation, called fuel NO_x , stems from the evolution and reaction of fuel-bound nitrogen compounds with oxygen. Due to the characteristically low fuel nitrogen content of natural gas, NO_x formation through the fuel NO_x mechanism is insignificant.

Carbon Monoxide -

The rate of CO emissions from boilers depends on the efficiency of natural gas combustion. Improperly tuned boilers and boilers operating at off-design levels decrease combustion efficiency resulting in increased CO emissions. In some cases, the addition of NO_x control systems such as low NO_x burners and flue gas recirculation (FGR) may also reduce combustion efficiency, resulting in higher CO emissions relative to uncontrolled boilers.

Volatile Organic Compounds -

The rate of VOC emissions from boilers and furnaces also depends on combustion efficiency. VOC emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. Trace amounts of VOC species in the natural gas fuel (e.g., formaldehyde and benzene) may also contribute to VOC emissions if they are not completely combusted in the boiler.

Sulfur Oxides -

Emissions of SO_2 from natural gas-fired boilers are low because pipeline quality natural gas typically has sulfur levels of 2,000 grains per million cubic feet. However, sulfur-containing odorants are added to natural gas for detecting leaks, leading to small amounts of SO_2 emissions. Boilers combusting unprocessed natural gas may have higher SO_2 emissions due to higher levels of sulfur in the natural gas. For these units, a sulfur mass balance should be used to determine SO_2 emissions.

Particulate Matter -

Because natural gas is a gaseous fuel, filterable PM emissions are typically low. Particulate matter from natural gas combustion has been estimated to be less than 1 micrometer in size and has filterable and condensable fractions. Particulate matter in natural gas combustion are usually larger molecular weight hydrocarbons that are not fully combusted. Increased PM emissions may result from poor air/fuel mixing or maintenance problems.

Greenhouse Gases -6-9

 CO_2 , CH_4 , and N_2O emissions are all produced during natural gas combustion. In properly tuned boilers, nearly all of the fuel carbon (99.9 percent) in natural gas is converted to CO_2 during the combustion process. This conversion is relatively independent of boiler or combustor type. Fuel carbon not converted to CO_2 results in CH_4 , CO, and/or VOC emissions and is due to incomplete combustion. Even in boilers operating with poor combustion efficiency, the amount of CH_4 , CO, and VOC produced is insignificant compared to CO_2 levels.

Formation of N_2O during the combustion process is affected by two furnace-zone factors. N_2O emissions are minimized when combustion temperatures are kept high (above 1475°F) and excess oxygen is kept to a minimum (less than 1 percent).

Methane emissions are highest during low-temperature combustion or incomplete combustion, such as the start-up or shut-down cycle for boilers. Typically, conditions that favor formation of N_2O also favor emissions of methane.

1.4.4 Controls^{4,10}

NO_x Controls -

Currently, the two most prevalent combustion control techniques used to reduce NO_x emissions from natural gas-fired boilers are flue gas recirculation (FGR) and low NO_x burners. In an FGR system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the recirculated gas is mixed with combustion air prior to being fed to the burner. The recycled flue gas consists of combustion products which act as inerts during combustion of the fuel/air mixture. The FGR system reduces NO_x emissions by two mechanisms. Primarily, the recirculated gas acts as a dilutent to reduce combustion temperatures, thus suppressing the thermal NO_x mechanism. To a lesser extent, FGR also reduces NO_x formation by lowering the oxygen concentration in the primary flame zone. The amount of recirculated flue gas is a key operating parameter influencing NO_x emission rates for these systems. An FGR system is normally used in combination with specially designed low NO_x burners capable of sustaining a stable flame with the increased inert gas flow resulting from the use of FGR. When low NO_x burners and FGR are used in combination, these techniques are capable of reducing NO_x emissions by 60 to 90 percent.

Low NO_x burners reduce NO_x by accomplishing the combustion process in stages. Staging partially delays the combustion process, resulting in a cooler flame which suppresses thermal NO_x formation. The two most common types of low NO_x burners being applied to natural gas-fired boilers are staged air burners and staged fuel burners. NO_x emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners.

Other combustion control techniques used to reduce NO_x emissions include staged combustion and gas reburning. In staged combustion (e.g., burners-out-of-service and overfire air), the degree of staging is a key operating parameter influencing NO_x emission rates. Gas reburning is similar to the use of overfire

in the use of combustion staging. However, gas reburning injects additional amounts of natural gas in the upper furnace, just before the overfire air ports, to provide increased reduction of NO_x to NO_2 .

Two postcombustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions are selective noncatalytic reduction (SNCR) and selective catalytic reduction (SCR). The SNCR system injects ammonia (NH₃) or urea into combustion flue gases (in a specific temperature zone) to reduce NO_x emission. The Alternative Control Techniques (ACT) document for NO_x emissions from utility boilers, maximum SNCR performance was estimated to range from 25 to 40 percent for natural gas-fired boilers. Performance data available from several natural gas fired utility boilers with SNCR show a 24 percent reduction in NO_x for applications on wall-fired boilers and a 13 percent reduction in NO_x for applications on tangential-fired boilers. In many situations, a boiler may have an SNCR system installed to trim NO_x emissions to meet permitted levels. In these cases, the SNCR system may not be operated to achieve maximum NO_x reduction. The SCR system involves injecting NH_3 into the flue gas in the presence of a catalyst to reduce NO_x emissions. No data were available on SCR performance on natural gas fired boilers at the time of this publication. However, the ACT Document for utility boilers estimates NO_x reduction efficiencies for SCR control ranging from 80 to 90 percent. NO_x

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.¹¹ Tables in this section present emission factors on a volume basis (lb/10⁶ scf). To convert to an energy basis (lb/MMBtu), divide by a heating value of 1,020 MMBtu/10⁶ scf. For the purposes of developing emission factors, natural gas combustors have been organized into three general categories: large wall-fired boilers with greater than 100 MMBtu/hr of heat input, boilers and residential furnaces with less than 100 MMBtu/hr of heat input, and tangential-fired boilers. Boilers within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas.

Emission factors are rated from A to E to provide the user with an indication of how "good" the factor is, with "A" being excellent and "E" being poor. The criteria that are used to determine a rating for an emission factor can be found in the Emission Factor Documentation for AP-42 Section 1.4 and in the introduction to the AP-42 document.

1.4.5 Updates Since the Fifth Edition

The Fifth Edition was released in January 1995. Revisions to this section are summarized below. For further detail, consult the Emission Factor Documentation for this section. These and other documents can be found on the Emission Factor and Inventory Group (EFIG) home page (http://www.epa.gov/ttn/chief).

Supplement D, March 1998

- Text was revised concerning Firing Practices, Emissions, and Controls.
- All emission factors were updated based on 482 data points taken from 151 source tests. Many new emission factors have been added for speciated organic compounds, including hazardous air pollutants.

July 1998 - minor changes

• Footnote D was added to table 1.4-3 to explain why the sum of individual HAP may exceed VOC or TOC, the web address was updated, and the references were reordered.

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION^a

	N	O _x ^b		СО
Combustor Type (MMBtu/hr Heat Input) [SCC]	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01]				
Uncontrolled (Pre-NSPS) ^c	280	A	84	В
Uncontrolled (Post-NSPS) ^c	190	A	84	В
Controlled - Low NO _x burners	140	A	84	В
Controlled - Flue gas recirculation	100	D	84	В
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]				
Uncontrolled	100	В	84	В
Controlled - Low NO _x burners	50	D	84	В
Controlled - Low NO _x burners/Flue gas recirculation	32	C	84	В
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	A	24	C
Controlled - Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]				
Uncontrolled	94	В	40	В

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10 ⁶ scf to kg/10⁶ m³, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from 1b/10 ⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

b Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_X emission factor. For

tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO x emission factor.

NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION^a

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	E
N ₂ O (Controlled-low-NO _X burner)	0.64	E
PM (Total) ^c	7.6	D
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	В
SO_2^{-d}	0.6	A
TOC	11	В
Methane	2.3	В
VOC	5.5	C

are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from lb/10⁶ scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.

^b Based on approximately 100% conversion of fuel carbon to CO_2 . $CO_2[lb/10^6 \text{ scf}] = (3.67)$ (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO_2 , C = carbon content of fuel by weight (0.76), and D = density of fuel, $4.2 \times 10^4 \text{ lb}/10^6 \text{ scf}$.

^c All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

d Based on 100% conversion of fuel sulfur to SO₂.

Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION^a

CAS No.	Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
91-57-6	2-Methylnaphthalene ^{b, c}	2.4E-05	D
56-49-5	3-Methylchloranthrene ^{b, c}	<1.8E-06	E
	7,12-Dimethylbenz(a)anthracene ^{b,c}	<1.6E-05	E
83-32-9	Acenaphthene ^{b,c}	<1.8E-06	E
203-96-8	Acenaphthylene ^{b,c}	<1.8E-06	Е
120-12-7	Anthracene ^{b,c}	<2.4E-06	Е
56-55-3	Benz(a)anthracene ^{b,c}	<1.8E-06	Е
71-43-2	Benzene ^b	2.1E-03	В
50-32-8	Benzo(a)pyrene ^{b,c}	<1.2E-06	Е
205-99-2	Benzo(b)fluoranthene ^{b,c}	<1.8E-06	Е
191-24-2	Benzo(g,h,i)perylene ^{b,c}	<1.2E-06	Е
205-82-3	Benzo(k)fluoranthene ^{b,c}	<1.8E-06	Е
106-97-8	Butane	2.1E+00	Е
218-01-9	Chrysene ^{b,c}	<1.8E-06	Е
53-70-3	Dibenzo(a,h)anthracene ^{b,c}	<1.2E-06	Е
25321-22-6	Dichlorobenzene ^b	1.2E-03	Е
74-84-0	Ethane	3.1E+00	Е
206-44-0	Fluoranthene ^{b,c}	3.0E-06	Е
86-73-7	Fluorene ^{b,c}	2.8E-06	Е
50-00-0	Formaldehyde ^b	7.5E-02	В
110-54-3	Hexane ^b	1.8E+00	Е
193-39-5	Indeno(1,2,3-cd)pyrene ^{b,c}	<1.8E-06	Е
91-20-3	Naphthalene ^b	6.1E-04	Е
109-66-0	Pentane	2.6E+00	Е
85-01-8	Phenanathrene ^{b,c}	1.7E-05	D

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION (Continued)

CAS No.	Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
74-98-6	Propane	1.6E+00	Е
129-00-0	Pyrene ^{b, c}	5.0E-06	E
108-88-3	Toluene ^b	3.4E-03	С

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. To convert from 1b/10⁶ scf to lb/MMBtu, divide by 1,020. Emission Factors preceded with a less-than symbol are based on method detection limits.

^b Hazardous Air Pollutant (HAP) as defined by Section 112(b) of the Clean Air Act.

^c HAP because it is Polycyclic Organic Matter (POM). POM is a HAP as defined by Section 112(b) of the Clean Air Act.

^d The sum of individual organic compounds may exceed the VOC and TOC emission factors due to differences in test methods and the availability of test data for each pollutant.

TABLE 1.4-4. EMISSION FACTORS FOR METALS FROM NATURAL GAS COMBUSTION^a

CAS No.	Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
7440-38-2	Arsenic ^b	2.0E-04	Е
7440-39-3	Barium	4.4E-03	D
7440-41-7	Beryllium ^b	<1.2E-05	Е
7440-43-9	Cadmium ^b	1.1E-03	D
7440-47-3	Chromium ^b	1.4E-03	D
7440-48-4	Cobalt ^b	8.4E-05	D
7440-50-8	Copper	8.5E-04	С
7439-96-5	Manganese ^b	3.8E-04	D
7439-97-6	Mercury ^b	2.6E-04	D
7439-98-7	Molybdenum	1.1E-03	D
7440-02-0	Nickel ^b	2.1E-03	С
7782-49-2	Selenium ^b	<2.4E-05	Е
7440-62-2	Vanadium	2.3E-03	D
7440-66-6	Zinc	2.9E-02	Е

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. Emission factors preceded by a less-than symbol are based on method detection limits. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by l6. To convert from lb/10⁶ scf to 1b/MMBtu, divide by 1,020.

b Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.

References For Section 1.4

- 1. Exhaust Gases From Combustion And Industrial Processes, EPA Contract No. EHSD 71-36, Engineering Science, Inc., Washington, DC, October 1971.
- 2. *Chemical Engineers' Handbook, Fourth Edition*, J. H. Perry, Editor, McGraw-Hill Book Company, New York, NY, 1963.
- 3. Background Information Document For Industrial Boilers, EPA-450/3-82-006a, U. S. Environmental Protection Agency, Research Triangle Park, NC, March 1982.
- 4. *Background Information Document For Small Steam Generating Units*, EPA-450/3-87-000, U. S. Environmental Protection Agency, Research Triangle Park, NC, 1987.
- 5. J. L. Muhlbaier, "Particulate and Gaseous Emissions From Natural Gas Furnaces and Water Heaters", *Journal Of The Air Pollution Control Association*, December 1981.
- 6. L. P. Nelson, *et al.*, *Global Combustion Sources Of Nitrous Oxide Emissions*, Research Project 2333-4 Interim Report, Sacramento: Radian Corporation, 1991.
- 7. R. L. Peer, *et al.*, *Characterization Of Nitrous Oxide Emission Sources*, Prepared for the U. S. EPA Contract 68-D1-0031, Research Triangle Park, NC: Radian Corporation, 1995.
- 8. S. D. Piccot, et al., Emissions and Cost Estimates For Globally Significant Anthropogenic Combustion Sources Of NO₂, N₂O, CH₄, CO, and CO₂, EPA Contract No. 68-02-4288, Research Triangle Park, NC: Radian Corporation, 1990.
- 9. Sector-Specific Issues and Reporting Methodologies Supporting the General Guidelines for the Voluntary Reporting of Greenhouse Gases under Section 1605(b) of the Energy Policy Act of 1992 (1994) DOE/PO-0028, Volume 2 of 3, U.S. Department of Energy.
- 10. J. P. Kesselring and W. V. Krill, "A Low-NO_x Burner For Gas-Fired Firetube Boilers", *Proceedings: 1985 Symposium On Stationary Combustion NO_x Control, Volume 2*, EPRI CS-4360, Electric Power Research Institute, Palo Alto, CA, January 1986.
- 11. Emission Factor Documentation for AP-42 Section 1.4—Natural Gas Combustion, Technical Support Division, Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency, Research Triangle Park, NC, 1997.
- 12. *Alternate Control Techniques Document NO_x Emissions from Utility Boilers*, EPA-453/R-94-023, U. S. Environmental Protection Agency, Research Triangle Park, NC, March 1994.

AP-42 Section 1.4: Natural Gas Combustion Data Files

The data that supports the emission factors are presented in summary in the background report and are reported more completely in an electronic database. The database is in Microsoft Access 97[®]. The file is located on the CHIEF web site at http://www.epa.gov/ttn/chief/ap42c1.html.

1.5 Liquefied Petroleum Gas Combustion

1.5.1 General¹

Liquefied petroleum gas (LPG or LP-gas) consists of propane, propylene, butane, and butylenes; the product used for domestic heating is composed primarily of propane. This gas, obtained mostly from gas wells (but also, to a lesser extent, as a refinery by-product) is stored as a liquid under moderate pressures. There are three grades of LPG available as heating fuels: commercial-grade propane, engine fuel-grade propane (also known as HD-5 propane), and commercial-grade butane. In addition, there are high-purity grades of LPG available for laboratory work and for use as aerosol propellants. Specifications for the various LPG grades are available from the American Society for Testing and Materials and the Gas Processors Association. A typical heating value for commercial-grade propane and HD-5 propane is 90,500 British thermal units per gallon (Btu/gal), after vaporization; for commercial-grade butane, the value is 97,400 Btu/gal.

The largest market for LPG is the domestic/commercial market, followed by the chemical industry (where it is used as a petrochemical feedstock) and the agriculture industry. Propane is also used as an engine fuel as an alternative to gasoline and as a standby fuel for facilities that have interruptible natural gas service contracts.

1.5.2 Firing Practices²

The combustion processes that use LPG are very similar to those that use natural gas. Use of LPG in commercial and industrial applications may require a vaporizer to provide the burner with the proper mix of air and fuel. The burner itself will usually have different fuel injector tips as well as different fuel-to-air ratio controller settings than a natural gas burner since the LPG stoichiometric requirements are different than natural gas requirements. LPG is fired as a primary and backup fuel in small commercial and industrial boilers and space heating equipment and can be used to generate heat and process steam for industrial facilities and in most domestic appliances that typically use natural gas.

1.5.3 Emissions^{1,3-5}

1.5.3.1 Criteria Pollutants -

LPG is considered a "clean" fuel because it does not produce visible emissions. However, gaseous pollutants such as nitrogen oxides (NO_x), carbon monoxide (CO), and organic compounds are produced as are small amounts of sulfur dioxide (SO_2) and particulate matter (PM). The most significant factors affecting NO_x , CO, and organic emissions are burner design, burner adjustment, boiler operating parameters, and flue gas venting. Improper design, blocking and clogging of the flue vent, and insufficient combustion air result in improper combustion and the emission of aldehydes, CO, hydrocarbons, and other organics. NO_x emissions are a function of a number of variables, including temperature, excess air, fuel and air mixing, and residence time in the combustion zone. The amount of SO_2 emitted is directly proportional to the amount of sulfur in the fuel. PM emissions are very low and result from soot, aerosols formed by condensable emitted species, or boiler scale dislodged during combustion. Emission factors for LPG combustion are presented in Table 1.5-1.

Table 1.5-1 presents emission factors on a volume basis (lb/10³gal). To convert to an energy basis (lb/MMBtu), divide by a heating value of 91.5 MMBtu/10³gal for propane and 102 MMBtu/10³gal for butane.

1.5.3.2 Greenhouse Gases⁶⁻¹¹ -

Carbon dioxide (CO_2) , methane (CH_4) , and nitrous oxide (N_2O) emissions are all produced during LPG combustion. Nearly all of the fuel carbon (99.5 percent) in LPG is converted to CO_2 during the combustion process. This conversion is relatively independent of firing configuration. Although the formation of CO acts to reduce CO_2 emissions, the amount of CO produced is insignificant compared to the amount of CO_2 produced. The majority of the 0.5 percent of fuel carbon not converted to CO_2 is due to incomplete combustion in the fuel stream.

Table 1.5-1. EMISSION FACTORS FOR LPG COMBUSTION^a

EMISSION FACTOR RATING: E

	Butane Emission Factor (lb/10³ gal)		Propane Emission Factor (lb/10³ gal)		
Pollutant	Industrial Boilers ^b Commercial Boilers ^c (SCC 1-02-010-01) (SCC 1-03-010-01)		Industrial Boilers ^b (SCC 1-02-010-02)	Commercial Boilers ^c (SCC 1-03-010-02)	
PM, Filterable ^d	0.2	0.2	0.2	0.2	
PM, Condensable	0.6	0.6	0.5	0.5	
PM, Total	0.8	0.8	0.7	0.7	
SO ₂ ^e	0.09S	0.09S	0.10S	0.10S	
NO _x f	15	15	13	13	
N_2O^g	0.9	0.9	0.9	0.9	
$\mathrm{CO_2}^{\mathrm{h,j}}$	14,300	14,300	12,500	12,500	
СО	8.4	8.4	7.5	7.5	
TOC	1.1	1.1	1.0	1.0	
CH ₄ ^k	0.2	0.2	0.2	0.2	

Assumes PM, CO, and TOC emissions are the same, on a heat input basis, as for natural gas combustion. Use heat contents of 91.5 x 10^6 Btu/ 10^3 gallon for propane, 102 x 10^6 Btu/ 10^3 gallon for butane, 1020 x 10^6 Btu/ 10^6 scf for methane when calculating an equivalent heat input basis. For example, the equation for converting from methane's emissions factors to propane's emissions factors is as follows: lb pollutant/ 10^3 gallons of propane = (lb pollutant / 10^6 ft³ methane) * (91.5 x 10^6 Btu/ 10^3 gallons of propane) / (1020 x 10^6 Btu/ 10^6 scf of methane). The NO_x emission factors have been multiplied by a correction factor of 1.5, which is the approximate ratio of propane/butane NO_x emissions to natural gas NO_x emissions. To convert from lb/ 10^3 gal to kg/ 10^3 L, multiply by 0.12. SCC = Source Classification Code.

^b Heat input capacities generally between 10 and 100 million Btu/hour.

^c Heat input capacities generally between 0.3 and 10 million Btu/hour.

d Filterable particulate matter (PM) is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train. For natural gas, a fuel with similar combustion characteristics, all PM is less than 10 μm in aerodynamic equivalent diameter (PM-10).

^e S equals the sulfur content expressed in gr/100 ft³ gas vapor. For example, if the butane sulfur content is 0.18 gr/100 ft³, the emission factor would be $(0.09 \times 0.18) = 0.016$ lb of $SO_2/10^3$ gal butane burned.

f Expressed as NO₂.

g Reference 12.

h Assuming 99.5% conversion of fuel carbon to CO₂.

^j EMISSION FACTOR RATING = C.

^k Reference 13.

Printed: 2/24/2021

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the

following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

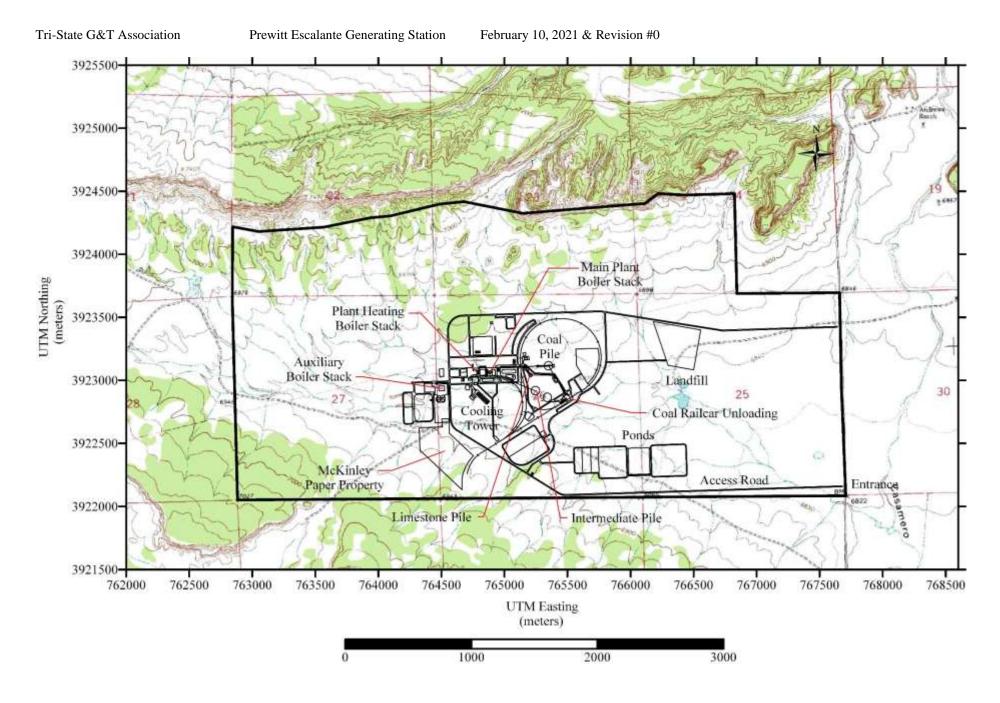


Figure 8-1: Topographical Map of PEGS Showing Plant Layout

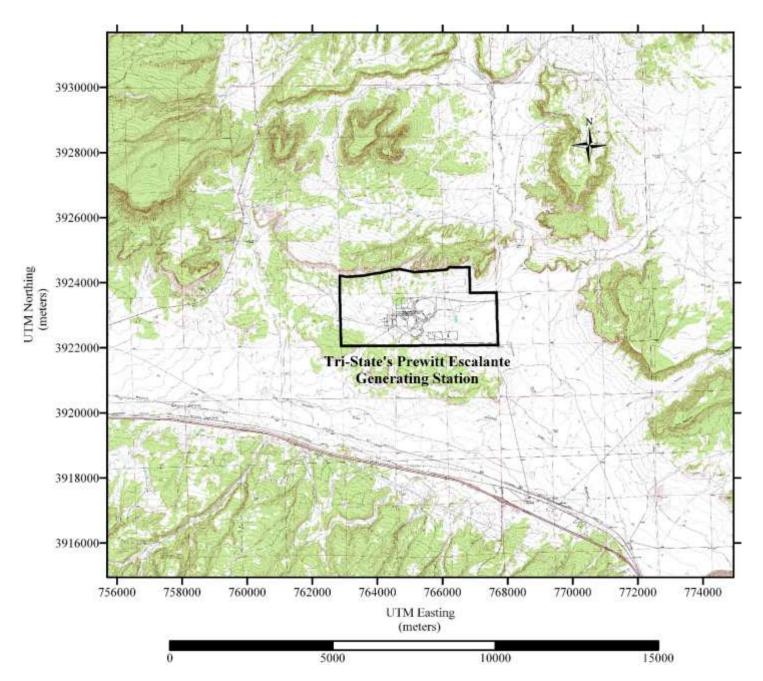


Figure 8-2: Topographical Map of PEGS Showing Surrounding Terrain

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC) (This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☐ I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications" This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and Significant Permit Revision public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

- 1. X A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
- 2. X A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g. post office, library, grocery, etc.)
- 3. X A copy of the property tax record (20.2.72.203.B NMAC).
- 4. X A sample of the letters sent to the owners of record.
- 5. X A sample of the letters sent to counties, municipalities, and Indian tribes.
- 6. X A sample of the public notice posted and a verification of the local postings.
- 7. X A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
- 8. X A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
- 9. X A copy of the <u>classified or legal</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 10. X A copy of the <u>display</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 11. X A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.



Figure 9-1: Aerial View of Half Mile Radius Around PEGS

List of Landowners within ½ mile of PEGS Restricted Boundary

Account No.	Owner Name	Address	City	State	Zip
1100	STATE OF NEW MEXICO	310 OLD SANTA FE TRAIL	SANTA FE	NM	87501-0000
	BUREAU OF LAND MANAGEMENT NEW MEXICO STATE OFFICE	1474 RODEO RD, PO BOX 27155	SANTA FE	NM	87502-0115
	NEW MEXICO STATE LAND OFFICE	PO BOX 1148	SANTA FE	NM	87504-1148
R173835	ANDREWS, BRENT D.	P.O. BOX 451	PREWITT	NM	87045-0451
R173878	ANDREWS, GARRETT ELLIS	1528 14TH STREET SE	RIO RANCHO	NM	87124-0000
R173614	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R173797	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R135194	DELANEY, WELDON V., JR.	2305 E. 14TH ST.	FARMINGTON	NM	87401-7514
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R182923	ELKINS, DAVID P. REVOCABLE TRUST	P.O. BOX 100	GAMERCO	NM	87317-0100
R176737	ELKINS, DONNY J. & ELKINS, JONATHAN	1103 MIMOSA DR.	ROSWELL	NM	88201-0000
R180572	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R186092	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R208842	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R204774	HODGES, JAMES R. &/OR CLAUDELI, ATTN: HODGES, RAY G	P.O. BOX 1089	GALLUP	NM	87305-1089
R173819	JOHNSON, LABERTA & JOHNSON, MELISSA & SMITH, NADINE	P.O. BOX 218	PREWITT	NM	87045-0218
R161632	KHALAF, NASHAT	1603 W. HISTORIC HWY. 66	GALLUP	NM	87301-0000
R135208	LARGO, JULIA & LARGO, GILBERT	7710 N. 12TH ST.	PHOENIX	AZ	85020-0000
R135216	LYTLE, VERLEE M. TRUSTEE	P.O. BOX 311	THOREAU	NM	87323-0311
R214369	NORTHWEST NEW MEXICO REGIONAL SOLID WASTE AUTHORITY	P.O.BOX 1330	THOREAU	NM	87323-0000
R211145	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R211147	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R205104	SMITH, DELMA SHERILYN & JONNIE LYNDELL & RICKERSON, JUDY LADEANE & ROBERT OWEN	419 PALOMINO LN	BLOOMFIELD	NM	87413-0000
R173703	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173738	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173886	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173908	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816

Account No.	Owner Name	Address	City	State	Zip
R140902	WALLACE, IRL & GEORGE ATHENS	207 S. 3RD ST.	GALLUP	NM	87301-0000
R187364	WALLACE, IRL & GEORGE ATHENS	P.O. BOX 1206	GALLUP	NM	87305-1206
R206650	WESTERN FUELS ASSOC. INC	12050 N. PECOS ST., STE. 310	WESTMINSTER	СО	80234-0000

Prewitt Escalante Generating Station

<u>Lists of Government and Tribal Entities Sent a Public Notice</u>

Government Entity	Official	Mail Address	City	State	Zip Code
McKinley County	Harriett K. Becenti, County Clerk	207 West Hill St. #100	Gallup	NM	87301
Cibola County	Michelle Dominguez, County Clerk	PO Box 190	Grants	NM	87020
Navajo Nation	Office of the President	PO Box 7440	Window Rock	AZ	86515
Baca-Prewitt Chapter		PO Box 563	Prewitt	NM	87045
Casamero Lake Chapter		PO Box 549	Prewitt	NM	87045
Crownpoint Chapter		PO Box 336	Crownpoint	NM	87313
Littlewater Chapter		PO Box 1898	Crownpoint	NM	87313
Mariano Lake Chapter		PO Box 164	Smith Lake	NM	87365
Smith Lake Chapter		PO Box 60	Smith Lake	NM	87365
Thoreau Chapter		PO Box 899	Thoreau	NM	87323

NOTICE

Tri-State Generation and Transmission Association, Inc. (Tri-State) announces its intent to apply to the New Mexico Environment Department for a significant revision to a minor source operating under Air Quality Permit 0285-M4R2, for its facility identified as the Prewitt Escalante Generating Station (PEGS). The expected date of the application submittal is February 25, 2021. This notice is a requirement of the New Mexico air quality regulations.

The exact location of PEGS is at latitude 35 deg, 24 min, 57.4 sec west and longitude 108 deg, 4 min, 57.6 sec north. The approximate location is 4 miles north of Prewitt, NM on the west side of County Road 19 in McKinley County.

PEGS was a single unit coal-fired electric generating station owned and operated by Tri-State. With this significant revision permit application, Tri-State is removing all sources and permit conditions involving shutting down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill as of January 28, 2021. Additionally, Tri-State will transfer operation of the existing fly ash handling system to Salt River Materials Group prior to issuance of this permit modification. Salt River Materials Group will be submitting a new NSR minor source permit application to operate the existing fly ash handling system. This modification of the permit is based on completion of the two phases discussed in Air Quality Permit 0285-M4R2; Phase 1 the shutdown of the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower, and Phase 2 the transfer of the existing auxiliary boiler and water treatment plant to McKinley Paper Company and fly ash system to Salt River Materials Group.

The estimated maximum quantities of any regulated air contaminants after Phase 1 and Phase 2 of the modification will be:

	Present Fac	ility Emissions	Post Facility	y Emissions	Change i	in Emissions
Pollutant:	Pounds per hour	Tons per year	Pounds per hour	Tons per year	Pounds per hour	Tons per year
PM ₁₀	104 pph	254 tpy	52 pph	28 tpy	-52 pph	-226 tpy
PM _{2.5}	68 pph	227 tpy	18 pph	6.9 tpy	-50 pph	-220.1 tpy
Sulfur Dioxide (SO ₂)	494 pph	2165 tpy	0.2 pph	<0.1 tpy	-493.8 pph	-2164.9 tpy
Nitrogen Oxides (NO _x)	1134 pph	4919 tpy	21 pph	12 tpy	-1113 pph	-4907 tpy
Carbon Monoxide (CO)	182 pph	749 tpy	11 pph	9.7 tpy	-171 pph	-739.3 tpy
Carbon Monoxide (CO) Startup/Shutdown	909 pph	23 tpy	0 pph	0 tpy	-909 pph	-23 tpy
Volatile Organic Compounds (VOC)	10 pph	40 tpy	pph	0.9 tpy	-9.1 pph	-39.1 tpy
Hazardous Air Pollutants (HAPs)	7.5 pph	32.0 tpy	0.2 pph	0.2 tpy	-7.3 pph	-31.8 tpy
State Toxic Air Pollutants (TAPs)	<0.5 pph	<0.5 tpy	<0.01 pph	<0.01 tpy	-0.49 pph	-0.49 tpy
Green House Gas Emissions as Total CO ₂ e	n/a	2,363,891 tpy	n/a	12,684 tpy	n/a	-2,275,984 tpy

The hours of operation will remain permitted for 24 hours per day, 7 days per week, and 8760 hours per year.

The owner and/or operator of the Facility is:

Tri-State Generation and Transmission Association P.O. Box 33695 Denver CO 80233-0695 If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

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Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non- discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at https://www.env.nm.gov/NMED/EJ/index.html to learn how and where to file a complaint of discrimination.

General Posting of Notices – Certification

I, Mike Griffin ,	the	undersigned,	certify	that	on
Februrary 8th, 2021 posted a true and correct copy of the attached	ed Pub	lic Notice in the	e followin	g publ	icly
accessible and conspicuous places in the Prewitt, Thoreau, and C	Grants (of McKinley Co	ounty, Sta	ite of N	New
Mexico on the following dates:		•	• •		
<i>-</i>					
1. <u>Tri-State's Facility entrance – Feb/8/2021</u>					
2. US Post Office in Prewitt, NM at 1692 State Highway	y 122 –	Feb/8/2021			
3. <u>US Post Office in Thoreau</u> , NM at 3 Prewitt St – Feb/	/8/2021				
4. City Hall in Grants, NM at 600 W Santa Fe Ave – Fel	<u>b/8/202</u>	<u>!1</u>			
Signed this 22 day of February . 202	1				
		2/22/202	21	-	
Signature	Date	;			
Mike Griffin					
Printed Name					
Timed Name					
IC&E/Environmental Supervisor – Prewitt Escalante Generating	g Statio	on		_	
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}					











February 10, 2021

Harriett K. Becenti McKinley County Clerk 207 West Hill St. #100 Gallup NM 87301

Ms. Becenti

Tri-State Generation and Transmission Association, Inc. (Tri-State) announces its intent to apply to the New Mexico Environment Department for a significant revision to a minor source operating under Air Quality Permit 0285-M4R2, for its facility identified as the Prewitt Escalante Generating Station (PEGS). The expected date of the application submittal is February 25, 2021. This notice is a requirement of the New Mexico air quality regulations.

The exact location of PEGS is at latitude 35 deg, 24 min, 57.4 sec west and longitude 108 deg, 4 min, 57.6 sec north. The approximate location is 4 miles north of Prewitt, NM on the west side of County Road 19 in McKinley County.

PEGS was a single unit coal-fired electric generating station owned and operated by Tri-State. With this significant revision permit application, Tri-State is removing all sources and permit conditions involving shutting down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill as of January 28, 2021. Additionally, Tri-State will transfer operation of the existing fly ash handling system to Salt River Materials Group prior to issuance of this permit modification. Salt River Materials Group will be submitting a new NSR minor source permit application to operate the existing fly ash handling system. This modification of the permit is based on completion of the two phases discussed in Air Quality Permit 0285-M4R2; Phase 1 the shutdown of the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower, and Phase 2 the transfer of the existing auxiliary boiler and water treatment plant to McKinley Paper Company and fly ash system to Salt River Materials Group.

The estimated maximum quantities of any regulated air contaminants after Phase 1 and Phase 2 of the modification will be:

	Present Faci	Present Facility Emissions		Post Facility Emissions		in Emissions
	Pounds	Tons per	Pounds	Tons per	Pounds	
Pollutant:	per hour	year	per hour	year	per hour	Tons per year
PM 10	104 pph	254 tpy	52 pph	28 tpy	-52 pph	-226 tpy
PM _{2.5}	68 pph	227 tpy	18 pph	6.9 tpy	-50 pph	-220.1 tpy
Sulfur Dioxide (SO ₂)	494 pph	2165 tpy	0.2 pph	<0.1 tpy	-493.8 pph	-2164.9 tpy
Nitrogen Oxides (NO _x)	1134 pph	4919 tpy	21 pph	12 tpy	-1113 pph	-4907 tpy
Carbon Monoxide (CO)	182 pph	749 tpy	11 pph	9.7 tpy	-171 pph	-739.3 tpy
Carbon Monoxide (CO) Startup/Shutdown	909 pph	23 tpy	0 pph	0 tpy	-909 pph	-23 tpy
Volatile Organic Compounds (VOC)	10 pph	40 tpy	pph	0.9 tpy	-9.1 pph	-39.1 tpy



Hazardous Air Pollutants (HAPs)	7.5 pph	32.0 tpy	0.2 pph	0.2 tpy	-7.3 pph	-31.8 tpy
State Toxic Air Pollutants (TAPs)	<0.5 pph	<0.5 tpy	<0.01 pph	<0.01 tpy	-0.49 pph	-0.49 tpy
Green House Gas Emissions as Total CO ₂ e	n/a	2,363,891 tpy	n/a	12,684 tpy	n/a	-2,275,984 tpy

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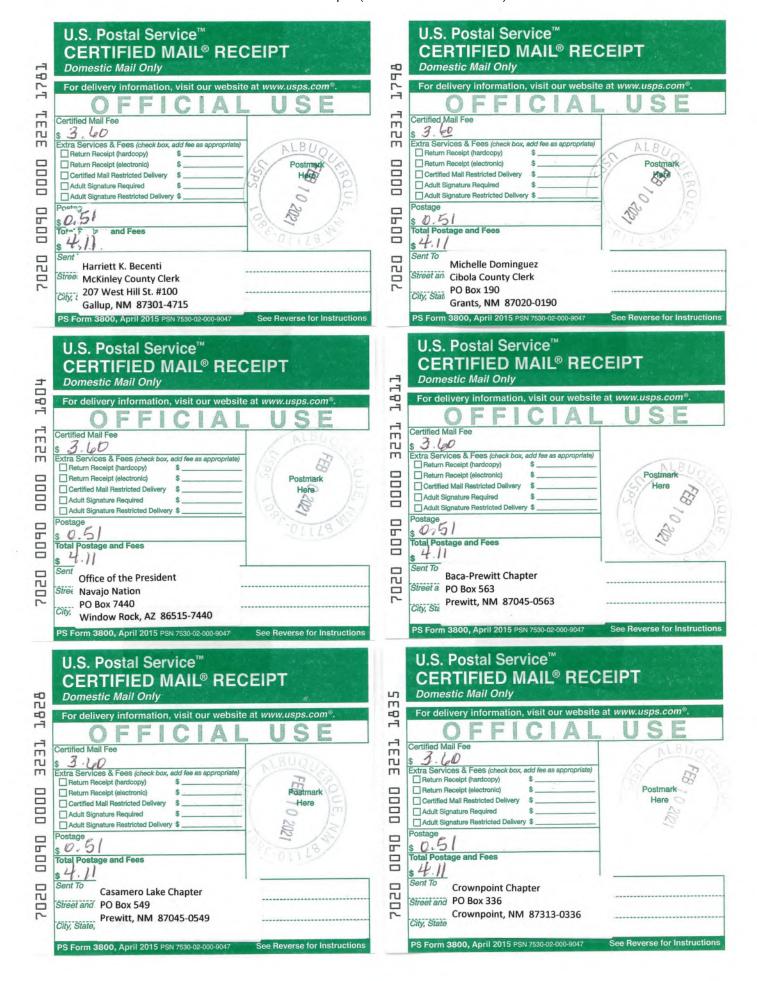
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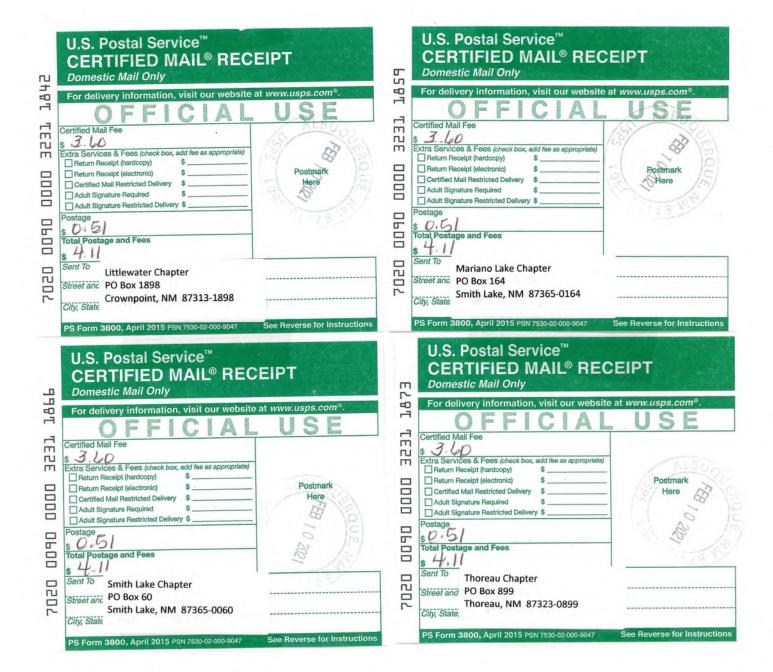
Sincerely,

Tri-State Generation and Transmission Association P.O. Box 33695
Denver CO 80233-0695

McKinley County Government Entities within 10 Miles October 2020

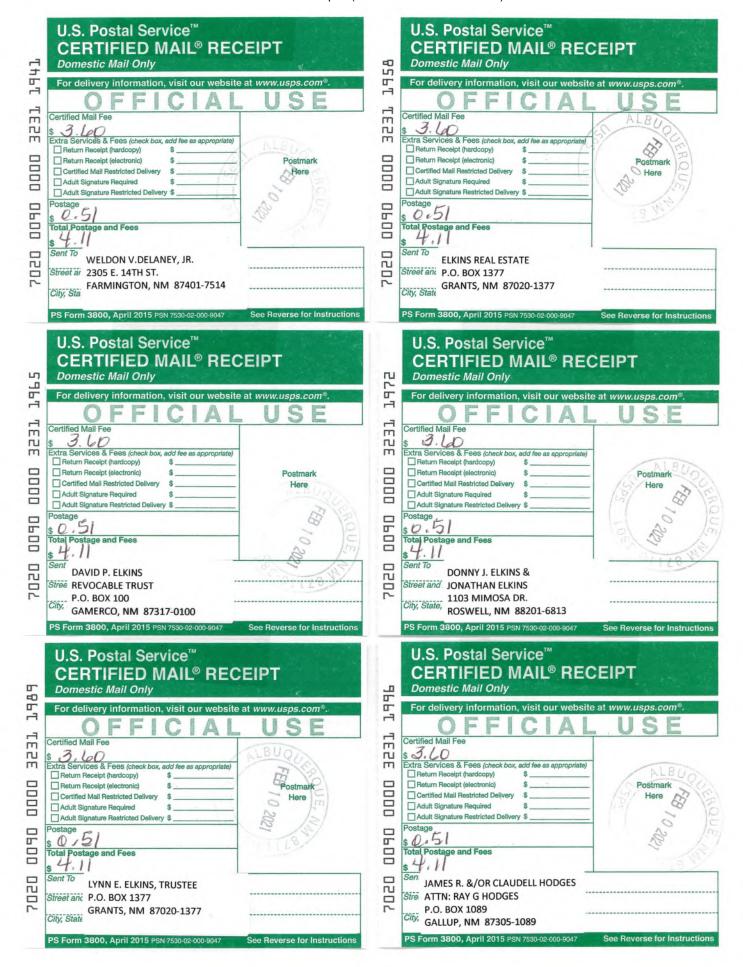
McKinley County	Harriett K. Becenti, County Clerk	207 West Hill St. #100	Gallup	NM	87301
Cibola County	Michelle Dominguez, County Clerk	PO Box 190	Grants	NM	87020
Navajo Nation	Office of the President	PO Box 7440	Window Rock	AZ	86515
Baca-Prewitt Chapter		PO Box 563	Prewitt	NM	87045
Casamero Lake Chapter		PO Box 549	Prewitt	NM	87045
Crownpoint Chapter		PO Box 336	Crownpoint	NM	87313
Littlewater Chapter		PO Box 1898	Crownpoint	NM	87313
Mariano Lake Chapter		PO Box 164	Smith Lake	NM	87365
Smith Lake Chapter		PO Box 60	Smith Lake	NM	87365
Thoreau Chapter		PO Box 899	Thoreau	NM	87323





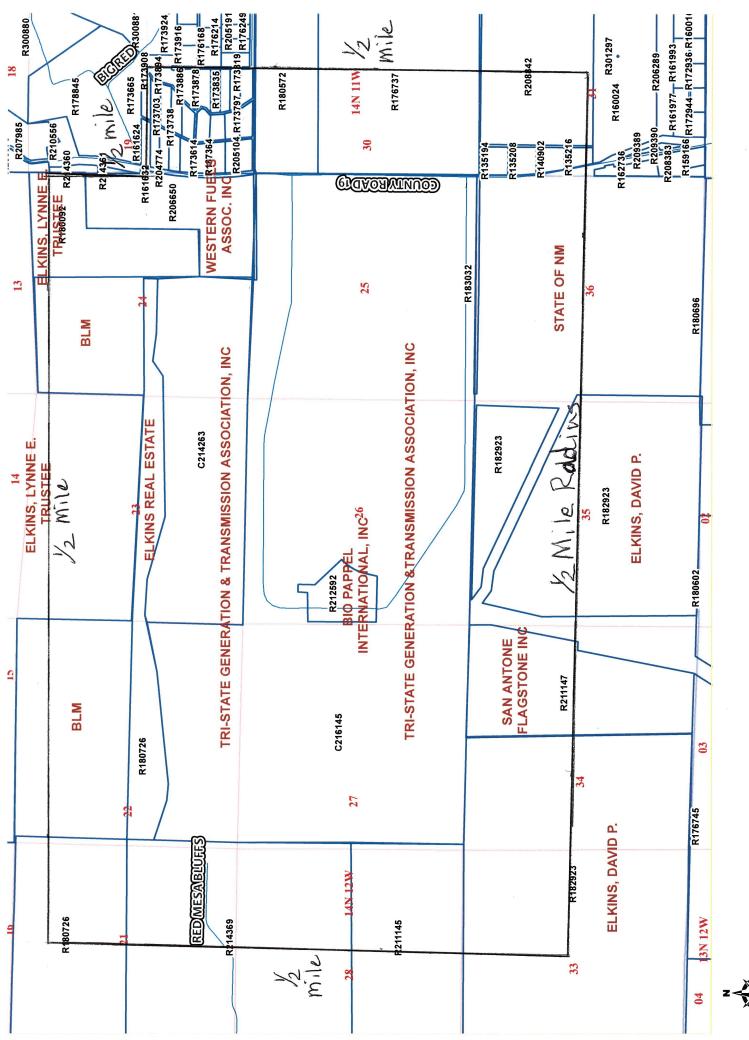
Account	Owner	Mail Address	City	State	Zip Code
	STATE OF NEW MEXICO	310 OLD SANTA FE TRAIL	SANTA FE	NM	87501-0000
	BUREAU OF LAND MANAGEMENT, NEW MEXICO STATE OFFICE	PO BOX 27155	SANTA FE	NM	87502-0115
	NEW MEXICO STATE LAND OFFICE	PO BOX 1148	SANTA FE	NM	87504-1148
R173835	ANDREWS, BRENT D.	P.O. BOX 451	PREWITT	NM	87045-0451
R173878	ANDREWS, GARRETT ELLIS	1528 14TH STREET SE	RIO RANCHO	NM	87124-0000
R173614	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R173797	ANDREWS, MARK, ETAL	1528 14TH ST. SE	RIO RANCHO	NM	87124-0000
R135194	DELANEY, WELDON V., JR.	2305 E. 14TH ST.	FARMINGTON	NM	87401-7514
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R180726	ELKINS REAL ESTATE	P.O. BOX 1377	GRANTS	NM	87020-1377
R182923	ELKINS, DAVID P. REVOCABLE TRUST	P.O. BOX 100	GAMERCO	NM	87317-0100
R176737	ELKINS, DONNY J. & ELKINS, JONATHAN	1103 MIMOSA DR.	ROSWELL	NM	88201-0000
R180572	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R186092	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R208842	ELKINS, LYNN E., TRUSTEE	P.O. BOX 1377	GRANTS	NM	87020-1377
R204774	HODGES, JAMES R. &/OR CLAUDELL ATTN: HODGES, RAY G	P.O. BOX 1089	GALLUP	NM	87305-1089
R173819	JOHNSON, LABERTA & JOHNSON, MELISSA & SMITH, NADINE	P.O. BOX 218	PREWITT	NM	87045-0218
R161632	KHALAF, NASHAT	1603 W. HISTORIC HWY. 66	GALLUP	NM	87301-0000
R135208	LARGO, JULIA & LARGO, GILBERT	7710 N. 12TH ST.	PHOENIX	AZ	85020-0000
R135216	LYTLE, VERLEE M. TRUSTEE	P.O. BOX 311	THOREAU	NM	87323-0311
R214369	NORTHWEST NEW MEXICO REGIONAL SOLID WASTE AUTHORITY	P.O.BOX 1330	THOREAU	NM	87323-0000
R211145	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R211147	SAN ANTONE FLAGSTONE INC.	P.O. BOX 100	GAMERCO	NM	87317-0100
R205104	SMITH, DELMA SHERILYN & JONNIE LYNDELL & RICKERSON, JUDY LADEANE & ROBERT OWEN	419 PALOMINO LN	BLOOMFIELD	NM	87413-0000
R173703	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173738	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173886	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R173908	TRUBY, JOE & DEBBY TRUSTEES	P.O. BOX 816	THOREAU	NM	87323-0816
R140902	WALLACE, IRL & GEORGE ATHENS	207 S. 3RD ST.	GALLUP	NM	87301-0000
R187364	WALLACE, IRL & GEORGE ATHENS	P.O. BOX 1206	GALLUP	NM	87305-1206
R206650	WESTERN FUELS ASSOC. INC	12050 N. PECOS ST., STE. 310	WESTMINSTER	CO	80234-0000

180	U.S. Postal Service [™] CERTIFIED MAIL [®] REC Domestic Mail Only For delivery information, visit our website		7.1	U.S. Postal Service [™] CERTIFIED MAIL® REC Domestic Mail Only For delivery information, visit our website	
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305	U.S. Postal Service [™] CERTIFIED MAIL [®] RECEIPT Domestic Mail Only	3356	U.S. Postal Service [™] CERTIFIED MAIL [®] RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com [®] .
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	City THOREAU, NM 87323-1330		PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	2	4

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Postage Adult Signature Restricted Delivery \$ Postage Sent To DELMA SHERILYN SMITH & JONNIE Street and LYNDELL & JUDY LADEANE & ROBERT OWEN RICKERSON City, State, 419 PALOMINO LN BLOOMFIELD. NM 87413-7206 PS Form 3800, April 2015 PSN 7530-02-000-9047 For delivery information, visit our website at www.usps.com®. USE Postage Solution Postmark Here Postmark Here Postmark Here Postmark Here Postmark Here Sent To DELMA SHERILYN SMITH & JONNIE Street and ROBERT OWEN RICKERSON City, State, 419 PALOMINO LN BLOOMFIELD. NM 87413-7206 PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	For delivery information, visit our website at www.usps.com®. OFFICIAL USE Certified Mail Fee \$ 3. 60 Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) \$ Postmark Return Receipt (electronic) \$ Postmark Adult Signature Required \$ Postage Adult Signature Restricted Delivery \$ Postage Postage and Fees Sent To Joe & DEBBY TRUBY, TRUSTEES Siried a P.O. BOX 816 THOREAU, NM 87323-0816 PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions
U.S. Postal Service CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com®. OFFICIAL USE Certified Mail Fee \$ 1 Clal USE Certified Mail Fee \$ 2 Certified Mail Fee \$ 3 Certified Mail Fee \$ 3 Certified Mail Fee \$ 3 Certified Mail Restricted Delivery \$ Postmark Return Receipt (hardcopy) \$ Postmark Adult Signature Restricted Delivery \$ Postage \$ 3 Certified Mail Restricted Delivery \$ Postmark Postage	U.S. Postal Service CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com®. Certified Mail Fee S. L. L. L. S. E. Certified Mail Fee S. L. L. L. S. E. Certified Mail Fee S. L. L. L. S. E. Certified Mail Fee S. L. L. L. S. E. Certified Mail Fee S. L. L. L. S. E. Certified Mail Fee S. L. L. L. S. E. Certified Mail Restricted Delivery \$
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NOTICE OF AIR QUALITY PERMIT APPLICATION

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NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non- discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at https://www.env.nm.gov/NMED/EJ/index.html to learn how and where to file a complaint of discrimination.

NOTICE OF AIR QUALITY PERMIT APPLICATION

Tri-State Generation and Transmission Association, Inc. (Tri-State) announces its intent to apply to the New Mexico Environment Department for a significant revision to a minor source operating under Air Quality Permit 0285-M4R2, for its facility identified as the Prewitt Escalante Generating Station (PEGS). The expected date of the application submittal is February 25, 2021. This notice is a requirement of the New Mexico air quality regulations. The exact location of PEGS is at latitude 35 deg, 24 min, 57.4 sec west and longitude 108 deg, 4 min, 57.6 sec north. The approximate location is 4 miles north of Prewitt, NM on the west side of County Road 19 in McKinley County. PEGS was a single unit coalfired electric generating

station owned and operated

by Tri-State. With this

significant revision permit application, Tri-State is removing all sources and permit conditions involving shutting down the coalfired boiler, associated coal and limestone handling equipment, and the cooling tower. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill as of January 28, 2021. Additionally, Tri-State will transfer operation of the existing fly ash handling system to Salt River Materials Group prior to issuance of this permit modification. Salt River Materials Group will be submitting a new NSR minor source permit application to operate the existing fly ash handling system. This modification of the permit is based on completion of the two phases discussed in Air Quality Permit 0285-M4R2; Phase 1 the shutdown of the coal-fired boiler, associated

coal and limestone handling equipment, and the cooling tower, and Phase 2 the transfer of the existing auxiliary boiler and water treatment plant to McKinley Paper Company and fly ash system to Salt River Materials Group.

The estimated maximum quantities of any regulated air contaminants after Phase 1 and Phase 2 of the modification will be:

RECEDED BUTTON OF

gmapp os		nt Facility nissions	Post Facility Emissions		Change i	ge in Emissions		
Pollutant:	Pounds per hour	Tons per year	Pounds per hour	Tons per year	Pounds per hour	Tons per year		
PM 10	104 pph	254 tpy	52 pph	28 tpy	-52 pph	-226 tpy		
PM _{2.5}	68 pph	227 tpy	18 pph	6.9 tpy	-50 pph	-220.1 tpy		
Sulfur Dioxide (SO ₂)	494 pph	2165 tpy	0.2 pph	<0.1 tpy	-493.8 pph	-2164.9 tpy		
Nitrogen Oxides (NO _x)	1134 pph	4919 tpy	21 pph	12 tpy	-1113 pph	-4907 tpy		
Carbon Monoxide (CO)	182 pph	749 tpy	11 pph	9.7 tpy	-171 pph	-739.3 tpy		
Carbon Monoxide (CO) Startup/Shutdown	909 pph	23 tpy	0 pph	0 tpy	-909 pph	-23 tpy		
Volatile Organic Compounds (VOC)	10 pph	40 tpy	pph 291	0.9 tpy	-9.1 pph	-39.1 tpy		
Hazardous Air Pollutants (HAPs)	7.5 pph	32.0 tpy	0.2 pph	0.2 tpy	-7.3 pph	-31.8 tpy		
State Toxic Air Pollutants (TAPs)	<0.5 pph	<0.5 tpy	<0.01 pph	<0.01 tpy	-0.49 pph	-0.49 tpy		
Green House Gas Emissions as Total CO ₂ e	n/a	2,363,891 tpy	n/a	12,684 tpy	n/a	-2,275,984 tp		

The hours of operation will remain permitted for 24 hours per day, 7 days per week, and 8760 hours per year.
The owner and/or operator of the Facility is:

Tri-State Generation and Transmission Association P.O. Box 33695 Denver CO 80233-0695

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800-224-7009; https://www.env.nm.gov/aqb/ permit/agb draft permits. html. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has

completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

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Notice of Non-Discrimination NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@ state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at https:// www.env.nm.gov/NMED/EJ/ index.html to learn how and where to file a complaint of discrimination.

> Publish: Gallup Sun February 12, 2021

PROOF OF PUBLICATION AFFIDAVIT

County of McKinley, <u>Mandy Marks</u> being duly sworn, testifies that she is the Circulation Manager of Gallup Sun Publishing, a weekly newspaper circulated in the above county and that he/she is familiar with the facts and that the notice, a copy of which is attached, was published in said newspaper one week for one consecutive week (one publication) prior to the time fixed for the hearing thereof, and that the publication was made on the:

day of February 2021
Dated 2/12/21
Maly W
Signature of Affiar(t)
State of New Mexico
County of) ss
On the 12th day of Cubruary 2021,
the foregoing instrument was acknowledged
before me by mandly marks OFFICIAL SEAL RYAN KRILEY
NOTARY PUBLIC STATE OF NEW MEXICO
Notary Public My Commission Expires: 4/17/2024
My Commission expires Lol 12 12 12 12 12 12 12 12 12 12 12 12 12
Wy Commission expires Lat I Late



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	Present Fac	ility Emissions	Post Facility	y Emissions	Change in Emissions		
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PUBLIC SERVICE ANNOUNCEMENT

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The exact location of PEGS is at latitude 35 deg, 24 min, 57.4 sec west and longitude 108 deg, 4 min, 57.6 sec north. The approximate location is 4 miles north of Prewitt, NM on the west side of County Road 19 in McKinley County.

Public notices have been posted in the following locations for review by the public:

- 1. At the Thoreau Post Office at 3 Prewitt St:
- 2. At the Prewitt Post Office at 1692 State Highway 122;
- 3. At the Grants City Administration in Grants at 600 W Santa Fe Ave; and
- 4. At the main entrance to Tri-State's Prewitt Escalante Generating Station

The owner and/or operator of the Facility is:

Tri-State Generation and Transmission Association P.O. Box 33695
Denver CO 80233-0695

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address:

Permit Programs Manager
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico; 87505-1816
Telephone Number (505) 476-4300 or 1 800 224-7009



February 9, 2021

KYVA Radio 300 W Aztec Ave. Suite 200 Gallup, NM 87301

CERTIFIED MAIL

Dear KYVA Radio:

SUBJECT: PSA Request - Revised Air Quality Construction Permit Application for Tri-State Generation and Transmission Association, Inc.'s Prewitt Escalante Generating Station (PEGS)

Attached is a copy of a public service announcement regarding the revision application for air quality permit #0285-M4-R2 for Tri-State Generation and Transmission Association, Inc.'s Prewitt Escalante Generating Station (PEGS). This announcement is being submitted by Montrose Air Quality Services, Albuquerque, NM on behalf of Tri-State Generation and Transmission Association, Inc.

The announcement request is being made to fulfill the requirements of the New Mexico Environmental Department air quality permitting regulations. Please consider reading the attached announcement as a public service message.

If you have any questions or need additional information, please contact me at (505) 830-9680 ext 6 (voice), (505) 830-9678 (fax) or email at pwade@montrose-env.com. You may also contact Ms Jennifer McCurdy, Tri-State Generation and Transmission Association, Inc. at (303) 254-3237. Thank you.

Sincerely,

Paul Wade

Senior Project Manager

Paul Wade

73	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only
P_	For delivery information, visit our website at www.usps.com®.
	OFFICIAL USE
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8791	\$ J. Q Extra Services & Fees (check box, add fee as appropriate)
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~	GALLUP, NM 87301-6324
	Uny,
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Written Description of the Routine Operations of the Facility

<u>A written description of the routine operations of the facility</u>. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

With this significant revision, Tri-State has permanently shut down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower. Tri-State has transferred ownership and operation of the existing auxiliary boiler and water treatment plant to McKinley Paper Company's Prewitt Mill. Additionally, Tri-State will be transferring operation of the fly ash system (S1 of E1, E67, E67A, E67B) to Salt River Materials Group (SRMG). SRMG purchased fly ash material from Tri-State's PEGS for resale to their construction materials clients until the coal-fired boiler shutdown as of August 31, 2020. SRMG will be repurposing the existing fly ash storage and loadout system as a distribution terminal for transloading construction materials. The remaining emission units, after Phases 1 and 2, will allow the continued decommissioning of Tri-State's PEGS facility until total facility closure.

Form-Section 10 last revised: 8/15/2011 Section 10, Page 1 Saved Date: 2/24/2021

Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, <u>Single Source Determination Guidance</u>, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe): Tri-State PEGS, McKinley Paper Company, Salt River Materials Group

B. Apply the 3 criteria for determining a single source:

<u>SIC Code</u>: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, <u>OR</u> surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

	□ Yes	X No			
Common Ownership or Cownership or control as this		inding or associ	ated sources are	under comn	non
	□ Yes	X No			
Contiguous or Adjacent:	Surrounding o	r associated sou	irces are contigi	uous or adjac	ent

 $X Yes \square No$

C. Make a determination:

with this source.

- X The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check AT LEAST ONE of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.
- ☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Saved Date: 2/24/2021

Section 12

Section 12.A PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

<u>A PSD applicability determination for all sources</u>. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the <u>EPA New Source Review Workshop Manual</u> to determine if the revision is subject to PSD review.

- A. With completion of Phase 1 and Phase 2 PEGS is no longer a PSD stationary source. The facility has been issued a minor NSR stationary source, Permit #0285M4R3.
- B. With shutdown of the coal-fired boiler (Unit E79), the facility will no longer be a fossil fuel-fired steam electric plant of more than 250 million Btu/hr heat input. The emissions listed below reflect the emission rates after completion of Phase 1 and Phase 2 discussed in this permit application.

a. NOx: 23 TPY
b. CO: 19.1 TPY
c. VOC: 1.48 TPY
d. SOx: 0.14 TPY
e. PM: 49 TPY
f. PM10: 14 TPY
g. PM2.5: 3.1 TPY
h. Fluorides: 0 TPY
i. Lead: <1 TPY

j. Sulfur compounds (listed in Table 2): 0 TPY

k. GHG: 25,195 TPY

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:

For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply**. **For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example,** if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:

For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. Here are examples: a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVENT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

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EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: http://cfpub.epa.gov/adi/

Form-Section 13 last revised: 5/29/2019 Section 13, Page 1 Saved Date: 2/24/2021

Table for STATE REGULATIONS:

Table for STATE REGULATIONS:							
STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)			
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.			
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	Applies to all PEGS emission sources that emit pollutants with an established state ambient air quality standard.			
20.2.7 NMAC	Excess Emissions	Yes	Facility	Applies to all PEGS emission sources that emit pollutants controlled by emission reduction equipment and methodologies.			
20.2.14.202 NMAC	Particulate Emissions from Coal Burning Equipment	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.			
20.2.31.109A NMAC	Coal Burning Equipment – sulfur dioxide	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.			
20.2.32.109 NMAC	Coal Burning Equipment – Nitrogen Dioxide	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.			
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		Unit E81 is not applicable to this regulation, due to size. With transfer of ownership and operation of Unit E80, the auxiliary boiler in Phase 2, this regulation will not apply to PEGS.			
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	E81, E151	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter (see 20.2.61.109 NMAC). This regulation applies to Units E81 (plant heating boiler) and E151 (emergency fire pump engine).			
20.2.70 NMAC	Operating Permits	No		With permanent shut down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower in Phase 1, this regulation will not apply to PEGS. After the permit revision is issued, Tri-State will apply for termination of their existing Title V Operating Permit #P012-R3.			
20.2.71 NMAC	Operating Permit Fees	No		With permanent shut down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower in Phase 1, this regulation will not apply to PEGS. After the permit revision is issued, Tri-State will apply for termination of their existing Title V Operating Permit #P012-R3.			
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is subject to 20.2.72 NMAC and will be subject to this regulation after the revised minor NSR permit.			
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	This facility is subject to 20.2.72 NMAC and will be subject to this regulation after the revised minor NSR permit.			
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No		With permanent shut down the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower in Phase 1, this regulation will not apply to PEGS. The NSR permit will be issued for a minor NSR stationary source.			
20.2.75 NMAC	Construction Permit Fees	No		This facility is subject to 20.2.72 NMAC and will be subject to this regulation after the revised minor NSR permit.			
20.2.77 NMAC	New Source Performance	No	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60, as amended through November 30, 2006. No source at PEGS is a NSPS Part 60 source.			

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	This facility emits hazardous air pollutants which are subject to the requirements of 40 CFR Part 61. With the removal of Unit E151, emergency fire pump engine, there are no source HAPS Part 61 sources.
20.2.84 NMAC	Acid Rain Permit	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.

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Table for Applicable FEDERAL REGULATIONS:

	pplicable FEDE	CRAL REC	<u>GULATI</u>	ONS:
FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This applies if you are subject to 20.2.70, 20.2.72, 20.2.74, and/or 20.2.79 NMAC. After permit revision, PEGS will be subject to 20.2.72 NMAC
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60, as amended through November 30, 2006. Subpart Db applies to E80 until completion of transfer of ownership and operation to McKinley Paper Company in Phase 2.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No		Subpart Db does not applies to PEGS since completion of transfer of ownership and operation of Unit E80 to McKinley Paper Company in Phase 2.
NSPS 40 CFR Part 60 Subpart Y	Standards of Performance for Coal Preparation Plants	No		With permanent shut down the coal-fired boiler and associated coal handling equipment in Phase 1, this regulation will not apply to PEGS.
40 CFR 64	Compliance Assurance Monitoring	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
NESHAP 40 CFR 68	Chemical Accident Prevention	No		PEGS has removed all chlorine gas sources.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	No		Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. Unit E151 has been removed so PEGS is not applicable to this regulation.
NESHAP 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	No	E81	With completion of Phases 1 and 2, Subpart DDDDD will no longer apply to Unit E81, since the facility will become a minor source for HAPS.
NESHAP 40 CFR 63 Subpart UUUUU	Mercury Achievable Control Technology Standards (MATS)	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.

Saved Date: 2/24/2021

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NESHAP 40 CFR 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Yes	E127	Establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices. Unit E127 is applicable to this regulation.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
Title IV 40 CFR 75	Acid Rain, Continuous Emissions Monitoring	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No		With shutdown of Unit E79 in Phase 1, the coal-fired boiler, this regulation will not apply to PEGS.
40CFR77	Excess Emissions	Yes	Facility	PEGS is subject to excess emission reporting requirements.

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Title V Sources (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has
developed an Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies defining the
measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by
20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request.
This plan should not be submitted with this application.

- X NSR (20.2.72 NMAC), PSD (20.2.74 NMAC) & Nonattainment (20.2.79 NMAC) Sources: By checking this box and certifying this application the permittee certifies that it has developed an <u>Operational Plan to Mitigate Source Emissions</u>

 <u>During Malfunction, Startup, or Shutdown</u> defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- X Title V (20.2.70 NMAC), NSR (20.2.72 NMAC), PSD (20.2.74 NMAC) & Nonattainment (20.2.79 NMAC) Sources: By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

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Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance

certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: https://www.env.nm.gov/aqb/permit/aqb_pol.html. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title "Construction Scenarios", specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

In the technical modification issued as NSR Permit #0285-M4R2, it discussed the three permitting scenarios. Scenario 1 begins with issuance of this technical permit revision with PEGS operations unchanged. Scenario 2 begins upon completion of either Phase 1 or Phase 2. Scenario 3 begins upon completion of both Phase 1 and Phase 2.

Phase 1 includes the shutdown of the coal-fired boiler, associated coal and limestone handling equipment, and the cooling tower after all existing coal stored at the site is combusted. This includes Units E22, E24, E26, E30, E32, E34, E35, E38, E42, E43, E45, E47, E49, E50, E74, E79, E126, and E150.

Phase 2 includes the transfer of the existing auxiliary boiler and water treatment plant to McKinley Paper Company, which occurred after a new 20.2.72 NMAC minor NSR permit has been issued for the Prewitt Mill. This includes Units E75, E76, and E80.

Phase 2 also includes the transfer of ownership of the fly ash system to Salt River Materials Group. Salt River Materials Group is applying for a new 20.2.72 NMAC minor NSR permit for operation of the existing fly ash system. This includes Units S1 of E1, E67, E67A and E67B.

Phase 2 also includes additional shutdown of PEGS sources associated with coal-fired boiler, associated coal and limestone handling equipment, the cooling tower, and landfill. This includes Units E27, E29, E39, E41, E63, E65, E68, and E151. Additionally, insignificant source S119 will be removed.

With this significant permit revision all permitting scenarios discussed above will have been completed. No new emission sources are proposed for the site.

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Air Dispersion Modeling

- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC).	
See #1 above. Note: Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3	
above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit	
replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application	
(20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4),	
20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling	
Guidelines.	

Check each box that applies:

Ш	See attached, approved modeling waiver for all pollutants from the facility.
	See attached, approved modeling waiver for some pollutants from the facility.
	Attached in Universal Application Form 4 (UA4) is a modeling report for all pollutants from the facility.
	Attached in UA4 is a modeling report for some pollutants from the facility.
X	No modeling is required.

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

Tri-State will comply with all compliance testing required after issuance of this permit revision.

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Other Relevant Information

<u>Other relevant information</u>. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

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Section 22: Certification

Company Name: Tri-State Generation and Transmission Association, Inc. I, Barbara A. Walz, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience. Signed this 10 day of February, 2021 upon my oath or affirmation, before a notary of the State of Colorado Feb/10/2021 *Signature Date Sr. VP Policy & Compliance/CCO Title Barbara A. Walz Printed Name Scribed and sworn before me on this 10 day of February 2021 My authorization as a notary of the State of <u>Colorado</u> Feb/10/2021 Date Diane E Robinson Notary Public State of Colorado Notary ID 20034022307

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

My Commission Expires December 4, 2024