

November 5, 2020

Mr. Joseph Kimbrell New Mexico Environment Department Air Quality Bureau 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87507-3313

**Subject:** Title V Permit Revision Application for Permit #P-062R3M2, San Juan Generating Station (SJGS)

Dear Mr. Kimbrell:

Attached please find two (2) hardcopies and two (2) electronic (CD) copies of the 20.2.70 NMAC Permit Renewal Application for Permit #062R3M3, PNM's San Juan Generating Station (SJGS). This letter is attached to the application copy that has the original notarized signature page (Section 22).

With this application, SJGS is renewing the existing Title V Permit #062R3M3 per 20.2.70.300.B.(2) NMAC. No change in facility operations have occurred since the last Title V Permit Revision.

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

Sincerely,

Paul Wade Sr. Engineer Montrose Air Quality Services, LLC

Cc: Robin DeLapp, PNM

Montrose Air Quality Services, LLC 3500 Comanche Road NE Suite G Albuquerque, NM 87107-4546 T: 505.830.9680 ext. 6 F: 505.830.9678 Pwade@montrose-env.com www.montrose-env.com

# 20.2.70 NMAC AIR QUALITY PERMIT RENEWAL APPLICATION

For

# PUBLIC SERVICE COMPANY OF NEW MEXICO



## SAN JUAN GENERATING STATION Waterflow, NM

Presently Operating Under Permit #P-062R3M3

> Prepared by Montrose Air Quality Services, LLC Albuquerque, NM November 2020

#### Public Service Company of NM

San Juan Generating Station

### **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: Received NOV 0 9 2020 Air Quality Burcau

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-I for submittal instructions for other permits.

This application is submitted as (check all that apply): 
□ 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 □ 20.2.72 NMAC application or revision □ 20.2.72.300 NMAC Streamline application
Title V Source: □ Title V (new) X Title V renewal □ TV minor mod. □ TV significant mod. TV Acid Rain: □ New X Renewal
PSD Major Source: □ PSD major source (new) □ minor modification to a PSD source □ a PSD major modification

#### **Acknowledgements:**

□ I acknowledge that a pre-application meeting is available to me upon request. X Title V Operating, Title IV Acid Rain, and NPR applications have no fees.

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: **20.2.70.300.B.(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

Sect	tion 1-A: Company Information	Al # if known (see 1 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.): 1421	Updating Permit/NOI #: P- 062R3M2	
Facility Name: San Juan Generating Station		Plant primary SIC Code (4 digits): 4911		
1		Plant NAIC code (6 digits): 221112		
a	Facility Street Address (If no facility street address, provide directions of US Highway 64 on County Road 6800.	from a prominent landmark)	: Facility is 3 miles north	
2	Plant Operator Company Name: Public Service Company of New Mexico	W Phone/Fax: (505) 241-2016 / (505) 241-2384		
a	Plant Operator Address: 2401 Aztec Road, NE, MS Z100 87107			
b	Plant Operator's New Mexico Corporate ID or Tax ID: 85-0019030			

3	Plant Owner(s) name(s): See Note 1 below	Phone/Fax: See Note 1 below		
a	Plant Owner(s) Mailing Address(s): See Note 1 below			
4	Bill To (Company): Public Service Company of New Mexico (PNM)	Phone/Fax: (505) 241-2016 / (505) 241-2384		
a	Mailing Address: 2401 Aztec Road, NE, MS Z100 87107	E-mail: Robin.DeLapp@pnmresources.com		
5	Preparer: X Consultant: Paul Wade, Montrose Air Quality Services, LLC	Phone/Fax: (505) 830-9680 x6 / (505) 830-9678		
a	Mailing Address: 3500 G, Comanche Rd NE, Albuquerque, NM 87107	E-mail: pwade@montrose-env.com		
6	Plant Operator Contact: Robin DeLapp	Phone/Fax: (505) 241-2016 / (505) 241-2384		
a	Address: 2401 Aztec Road, NE, MS Z100 87107	E-mail: Robin.DeLapp@pnmresources.com		
7	Air Permit Contact: Robin DeLapp	Title: Technical Project Manager		
a	E-mail: Robin.DeLapp@pnmresources.com	Phone/Fax: (505) 241-2016 / (505) 241-2384		
b	Mailing Address: 2401 Aztec Road, NE, MS Z100 87107			
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

1.a	Has this facility already been constructed? X Yes □ No	1.b If yes to question 1.a, is it currently operatingin New Mexico? $\mathbf{X}$ Yes $\Box$ 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? <b>X</b> Yes $\Box$ 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 since 1972? □ Yes X No					
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since $\frac{8}{31}/1972$ ?					
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? X Yes □ No	If yes, the permit No. is: P- 062R3M2				
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: 0063M12				
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 facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)					
a	Current     Hourly: 468 tons coal     Daily: 11,233 tons coal     Annually: 4,100,000 tons coal					
b	Proposed Hourly: 468 tons coal Daily: 11,233 tons coal Annually: 4,100,000 tons coal					
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	a Current Hourly: 930 mw-hrs (gross) Daily: 22,320 mw-hrs (gross) Annually: 8.147 E06 mw					
1	b Proposed Hourly: 930 mw-hrs (gross) Daily: 22,320 mw-hrs (gross) Annually: 8.147 E06 mw-hrs			A = 11 = 12 + 12 = 12 = 127 = 120		

Sect	10n 1-D: F	acinity Loca	tion Information				
1	Section: 16,17,18,19, 20,21,29,30	Range: 15W	Township: 30N	County: S	an Juan		Elevation (ft): 5,300
2	UTM Zone:	<b>X</b> 12 or □13		Datum:	□ NAD 27 X	NAD S	83 🗆 WGS 84
а	UTM E (in mete	ers, to nearest 10 meter	rs): 728.50	UTM N (ii	n meters, to nearest 10	meters):	4,075.98
b	AND Latitude	(deg., min., sec.)	36°, 48', 7.4" N	Longitude	e (deg., min., sec.):	108°, 2	26', 19.5" W
3	Name and zip	code of nearest N	ew Mexico town: Waterflo	w, 87421			
4			om nearest NM town (attack on county road 6800.	n a road maj	p if necessary): Fac	cility is	3 miles north of the
5	The facility is	3 miles North of V	Waterflow, NM.				
6	Status of land a	at facility (check	one): X Private 🗆 Indian/P	ueblo 🗆 Feo	leral BLM 🛛 Fed	eral For	rest Service   Other (specify)
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Kirtland, San Juan County, Navajo Nation, Ute Mountain Ute Tribe						
8	<b>20.2.72</b> NMAC applications <b>only</b> : 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 <u>www.env.nm.gov/aqb/modeling/class1areas.html</u> )? <b>X</b> Yes □ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Mesa Verde National Park – 39.96 km, CO - 21.90 km.						
9	Name nearest Class I area: Mesa Verde National Park						
10	Shortest distan	ce (in km) from f	acility boundary to the bou	ndary of the	nearest Class I are	ea (to the	nearest 10 meters): 39.96 km
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 825 m from facility boundary						
	Method(s) used to delineate the Restricted Area: Restricted area is delineated using signs and fencing.					cing.	
12	" <b>Restricted Area</b> " is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.						
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? □ Yes X No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.						
14	Will this facilit If yes, what is	ty operate in conjute the name and per	unction with other air regul nit number (if known) of th	ated parties	on the same prope	erty?	🗌 No 🛛 Yes
	Kiver Material	s Group, NSR 24	51				

## **Section 1-D: Facility Location Information**

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

1	Facility <b>maximum</b> operating $(\frac{\text{hours}}{\text{day}})$ : 24	( <del>days</del> ): 7	$\left(\frac{\text{weeks}}{\text{year}}\right)$ : 52	$(\frac{\text{hours}}{\text{year}})$ : 8760	
2	Facility's maximum daily operating schedule (if less	s than $24 \frac{\text{hours}}{\text{day}}$ )? Start:	□AM □PM	End:	□AM □PM
3	Month and year of anticipated start of construction: Title V Renewal Application				
4	Month and year of anticipated construction completion: Title V Renewal Application				
5	Month and year of anticipated startup of new or modified facility: Title V Renewal Application				
6	Will this facility operate at this site for more than or	ne year? X Yes □ No			

## Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? $\Box$ Yes X No If yes, specify:					
a	If yes, NOV date or description of issue:			NOV Tracking No:		
b	Is this application in response to any issue listed in 1-F, 1 c	or 1a above? 🗆 Yes 🛛	<b>X</b> 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 submitted with this application?					
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B?					
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <b>X</b> Yes □ No					
a	If Yes, what type of source?XMajor (X $\geq 10$ tpy of anOR $\Box$ Minor ( $\Box < 10$ tpy of an			5 tpy of any combination of HAPS) 5 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? X Yes □ No					
	If yes, include the name of company providing commercial electric power to the facility: <u>Facility is an Electric Generating</u> <u>Station</u>					
a	a Commercial power is purchased from a commercial utility company, which specifically does not include power generative 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."	<b>X</b> N/A (This is not a Streamline application.)
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# **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.) Sky Northup (20.2.70.300.D.2 NMAC):		Phone: (505) 598-7570		
а	R.O. Title: Director, Plant Management I	R.O. e-mail: Sky.N	Northup@pnm.com		
b	R. O. Address: 6800 N. County Road, P.O. Box 227, Waterflow, N	M 87421			
2	Alternate Responsible Official Curtis McGee (20.2.70.300.D.2 NMAC):	IcGee Phone: (505) 598-7958			
а	A. R.O. Title: Manager, Plant Operations	A. R.O. e-mail: Curtis.McGee@pnm.com			
b	A. R. O. Address: 6800 N. County Road, P.O. Box 227, Waterflow, NM 87421				
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): NA				
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): PNM Resources, Inc				
а	Address of Parent Company: 414 Silver Avenue, Albuquerque, New Mexico 87102				
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.): PNM, Texas-New Mexico Power Company (TNMP)				
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:				

7

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: Yes. Colorado 21.90 km, Arizona 54.4 km, Navajo Reservation 3.7 km, Southern Ute Reservation 30.6 km, Ute Mtn. Ute Reservation 4.7 km

## **Note 1: Facility Owners and Addresses:**

Facility Owner's Name:

Unit 1:	Public Service Company of New Mexico
	Tucson Electric Power Company
Unit 4:	Public Service Company of New Mexico
	Utah Associated Municipal Power Systems
	City of Farmington
	Los Alamos County

Facility Owner's Mailing Address:

Public Service Company of New Mexico (PNM) (Partial Owner Units 1 and 4) (Operator Units 1 and 4) 2401 Aztec Road, NE Albuquerque, New Mexico 87107

Tucson Electric Power Company (Partial Owner – Unit 1) P. O. Box 711 (ER101) Tucson, AZ 85702

Utah Associated Municipal Power Systems (Partial Owner – Unit 4) 155 North 400 West – Suite 480 Salt Lake City, UT 84103

City of Farmington (Partial Owner – Unit 4) 501 McCormick School Road Farmington, NM 87401

County of Los Alamos (Partial Owner – Unit 4) 1000 Central Ave #130 Los Alamos, NM 87544

## **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:

- 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 copy should be printed in book form, 3-hole punched, and must be double sided. Note that this is in addition to the head-toto 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):**

□ CD/DVD attached to	paper application
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□ secure electronic transfer. Air Permit Contact Name\_\_\_\_\_

Email		

#### Phone number \_\_\_\_\_

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 <u>summary report only</u> 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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#### San Juan Generating Station

## 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.

Unit					Manufact- urer's Rated	Requested Permitted	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classi-		RICE Ignition Type (CI, SI,	Replacing
Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Capacity <sup>3</sup> (Specify Units)	Capacity <sup>3</sup> (Specify Units)	Date of Construction/ Reconstruction <sup>2</sup>	Emissions vented to Stack #	fication Code (SCC)	For Each Piece of Equipment, Check One	4SLB, 4SRB, 2SLB) <sup>4</sup>	Unit No.
E101	Coal Pile Maintenance Pile A	NIA	NIA	NA			NA	NA	253500	Existing (unchanged)      To be Removed     Declargement Unit		NA
E101	(S111,SU301)	NA	NA	NA			NA	NA	00040	New/Additional       Replacement Unit         To Be Modified       To be Replaced		NA
E102	Coal Pile Maintenance Pile B	NA	NA	NA			NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
L102	(S112,SU302)	INA	INA	NA .			NA	NA	00040	To Be Modified     To be Replaced		
E103	Coal Pile Maintenance Pile C	NA	NA	NA	2400 hrs/yr	2400 hrs/yr	NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
1105	(S113,SU303)		1111	1111	dozer op	dozer op	NA	NA	00040	□ To Be Modified □ To be Replaced		1111
E104	Coal Pile Maintenance Pile D	NA	NA	NA			NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
	(S114,SU304)				-		NA	NA	00040	□ To Be Modified □ To be Replaced		
E105	Force Majeure Coal	NA	NA	NA			NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
	Pile Maintenance						NA	NA	00040	□ To Be Modified □ To be Replaced		
E105	Coal Material	NA	NA	NA	380,000 tpy coal	380,000 tpy coal	NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E103	Handling (S145, S146)	NA	INA	NA	(combined)	(combined)	NA	NA	00040	□ To Be Modified □ To be Replaced		INA
E201	Coal Pulverizers	Unit 1-B&W, Unit 4 -	MPS89 (1),	NA	4,100,000 tpy coal	4,100,000 tpy coal	1983-1984	15	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
	(S204)	Foster Wheeler	MBF23 (4)		(combined)	(combined)	3/4 - orig eqpt	NA	00040	□ To Be Modified □ To be Replaced		
E202	Coal Silo Transfer	NA	NA	NA	4,100,000	4,100,000	NA	15	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E202	Point (S201)	NA	INA	NA	tpy coal (combined)	tpy coal (combined)	NA	NA	00040	□ To Be Modified □ To be Replaced		INA
E203	Coal Belt to Pulverizers Transfer	NA	NA	NA	4,100,000	4,100,000	NA	15	253500	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E205	Points (S203)	MA	INA	NA	tpy coal (combined)	tpy coal (combined)	NA	NA	00040	□ To Be Modified □ To be Replaced		NA
F201		Foster	00.10((		3,707	3,707	Dec-76	1A,1B,1C, 14A	210100	■ Existing (unchanged) □ To be Removed		
E301	Unit 1 Boiler	Wheeler	08-1266	NA	MMBtu/hr	MMBtu/hr	Dec-76	1(E301)	2000	New/Additional       Replacement Unit         To Be Modified       To be Replaced		NA
<b>5</b> 20 (		Babcock &			5,649	5,649	Apr-82	4A,4B,4C, 14B	210100	■ Existing (unchanged) □ To be Removed		
E304	Unit 4 Boiler	Wilcox	RB-545	NA	MMBtu/hr	MMBtu/hr	Apr-82	4(E304)	2000	New/Additional       Replacement Unit         To Be Modified       To be Replaced		NA
E 40 4	Unit 1 Cooling		DC		170,000	170,000	Dec-76	16	282000	■ Existing (unchanged) □ To be Removed		N7.1
E406	Tower (S425)	Marley	D52	6615-5-11	gpm	gpm	Dec-76	NA	0000	□ New/Additional       □ Replacement Unit         □ To Be Modified       □ To be Replaced		NA

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Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of I	Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
E409	Unit 4 Cooling	Marley	Model 2	6616-12-113-	227,500	227,500	Dec-76	16	282000	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>		NA
2107	Tower (S428)		11100012	80	gpm	gpm	Dec-76	NA	0000	To Be Modified	□ To be Replaced		
E410	Aux #1/Aux2 Cooling Tower (S429)	Marley	600 series	NA	35,000 gpm	35,000 gpm	1978 1978	16 NA	282000 0000	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> <li>To be Replaced</li> </ul>		NA
E506	Unit 4 Flyash Silo	W/W/ Cl-	IM2596	NA	25,040	25,040	Apr-82	8	NIA	<ul> <li>Existing (unchanged)</li> <li>Num(Additional</li> </ul>	□ To be Removed		NIA
E506	Baghouse (S513)	W.W. Sly	JM3586	NA	scfm	scfm	Apr-82	8	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul><li>Replacement Unit</li><li>To be Replaced</li></ul>		NA
E507	Unit 1 Flyash Silo	NTA	NA	NA	287360	287360	Dec-76	17	NA	<ul> <li>Existing (unchanged)</li> <li>Num(Additional</li> </ul>	□ To be Removed		NA
E307	Bin Vent (S514)	NA	NA	NA	tpy ash	tpy ash	Dec-76	NA	INA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul><li>Replacement Unit</li><li>To be Replaced</li></ul>		NA
5510	Unit 4 Flyash Silo	DT A	DT A		449000	449000	Apr-82	17		Existing (unchanged)	□ To be Removed		
E510	Bin Vent (S517)	NA	NA	NA	tpy ash	tpy ash	Apr-82	NA	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul><li>Replacement Unit</li><li>To be Replaced</li></ul>		NA
E518	Unit 1 Flyash Silo	W.W. Sly	NA	NA	18,645	18,645	Oct -2008	5	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>		NA
E318	Baghouse (S518)	W.W. 51y	NA	INA	scfm	scfm	Oct-2008	5	INA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced		NA .
E602	Unit 1 Emergency	Cotomillon	C12	DW/200522	625 DUD	625 DUD	7/19/2018	NA	201001	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	□ To be Removed	CI	NA
E002	Generator (S612)	Caterpillar	C13	PW300522	635 BHP	635 BHP	7/19/2018	NA	02	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul><li>Replacement Unit</li><li>To be Replaced</li></ul>	CI	NA
E606	Switchyard Emergency	Cummins	NT-855-G	NA	270 BHP	270 BHP	Pre 1980	NA	201001	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>	CI	NA
2000	Generator (S623)	Cummins	111 000 0	1111	270 BII	270 BII	Pre 1980	NA	02	□ To Be Modified	□ To be Replaced	CI	1421
E607	Admin/Data Center	Cummins	DSHAF	21774490	364 BHP	364 BHP	08/06/2007	NA	201001	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>	CI	NA
	Emergency Generator						03/2008	NA	02	□ To Be Modified	□ To be Replaced		
E701, E705,	Paved Roads	NA	NA	NA	NA	NA	NA	21	229401	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>		NA
E708	T uved Rouds	14/1	1171	117	11/1	11/1	NA	NA	5000	□ To Be Modified	<ul> <li>To be Replaced</li> </ul>		1111
E702, E703,	Unpaved Roads	NA	NA	NA	NA	NA	NA	19, 20	229600	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>		NA
E704-B, E706	Onpaved Roads	NA	INA	NA	MA	INA	NA	NA	0000	<ul> <li>To Be Modified</li> </ul>	<ul> <li>To be Replaced</li> </ul>		NA
E704	Front End Loader Operation around	NA	NA	NA	1,950	1,950	NA	NA	253500	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>		NA
2,04	Coal Pile (S738)	1 12 1	1 12 1	1 12 1	VMT	VMT	NA	NA	00040	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced		1 12 1
E707	Front End Loader	N7.4	NT A	NT 4	5,128	5,128	NA	18	NT A	<ul> <li>Existing (unchanged)</li> <li>New(Additional)</li> </ul>	□ To be Removed		N7.4
E707	Operation around Gypsum Pile (S752)	NA	NA	NA	VMT	VMT	NA	NA	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Unit</li> <li>To be Replaced</li> </ul>		NA

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					Manufact- urer's Rated	Requested Permitted	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classi-		RICE Ignition	
Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Capacity <sup>3</sup> (Specify Units)	Capacity <sup>3</sup> (Specify Units)	Date of Construction/ Reconstruction <sup>2</sup>	Emissions vented to Stack #	fication Code (SCC)	For Each Piece of Equipment, Check One	Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
E801	Limestone Truck	NA	NA	NA	227,000	227,000	Mar-98	NA	253000	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E901	Unloading (S801)	NA	NA	NA	tpy	tpy	Mar-98	NA	0100	□ To Be Modified □ To be Replaced		NA
E002	Limestone Pile	<b>N</b> 7.4	NIA	214	1,300	1,300	NA	NA	253000	■ Existing (unchanged) □ To be Removed		<b>N</b> T 4
E802	Maintenance (S804)	NA	NA	NA	hrs/yr dozer op	hrs/yr dozer op	NA	NA	0100	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		NA
E803	Limestone Silo	NA	NA	NA	227,000	227,000	Mar-98	9	253000	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E003	Loading (S806)	NA	NA	INA	tpy	tpy	Mar-98	9	0100	□ To Be Modified □ To be Replaced		INA
E804	Limestone Hopper to	NA	NA	NA	227,000	227,000	Mar-98	NA	253000	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E804	Transfer Conveyor (S805)	NA	NA	NA	tpy	tpy	Mar-98	NA	0100	□ To Be Modified □ To be Replaced		INA
E905	Limestone Silo to	NI A	NIA	NA	227,000	227,000	Mar-98	NA	253000	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NI A
E805	Weigh Belt to Ball Mill (S807)	NA	NA	NA	tpy	tpy	Mar-98	NA	0100	□ New/Additional       □ Replacement Unit         □ To Be Modified       □ To be Replaced		NA
E901	Unit 1 Activated carbon silo baghouse	NA	NA	NA	578 scfm	578 scfm	Nov-2008	10	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E901	(S901)	NA	NA	NA	578 scim	578 scim	Nov-2008	10	NA	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		NA
E904	Unit 4 Activated	NA	NA	NA	578 scfm	578 scfm	Nov-2007	13	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E904	carbon silo baghouse (S904)	INA	INA	INA	578 scim	578 scim	Nov-2007	13	INA	□ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		INA
E905	Urea silo baghouse	Chemco	CECDC3	1	578 acfm	578 scfm	1/9/2016	22	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>		NA
E903	(\$905)	Chemico	00	1	578 acim	578 scilli	1/14/2016	14	INA	Image: New/Additional     Image: Replacement Unit       Image: Image: New/Additional     Image: Replacement Unit       Image:		INA

#### Table 2-B: Insignificant Activities<sup>1</sup> (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/aqb/permit/aqb\_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/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf. 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 <sup>2</sup>	For Each Piece of Equipment, Check Onc
	Source Description	ivianui actui er	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	For Each Free or Equipment, Check Off
E603	Unit 2 Emergency Generator	Cummins - Rio	NA	635	20.2.72.202.B.3	Nov-73	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
E005	(S613)	Grande	NA	BHP	IA #7	Nov-73	□ To Be Modified □ To be Replaced
E604	Unit 3 Emergency Generator	Detroit Diesel	9163-7305	1420	20.2.72.202.B.3	Dec-79	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
Loot	(S620)	Deaton Dieser	NA	BHP	IA #7	Dec-79	□ To Be Modified □ To be Replaced
E605	Unit 4 Emergency Generator	Detroit Diesel	9163-7305	1420	20.2.72.202.B.3	Apr-82	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
E005	(S621)	Denon Dieser	NA	BHP	IA #7	Apr-82	□ To Be Modified □ To be Replaced
6101	Loadin Stacker to Pile A Drop	NA	NA	1,600,000	20.2.72.202.B.5	Nov-73	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
S101	Operation	NA	NA	tpy	IA#1a	Nov-73	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
G100	Loadin Stacker to Pile B Drop		NA	1,600,000	20.2.72.202.B.5	Dec-76	■ Existing (unchanged) □ To be Removed
S102	Operation	NA	NA	tpy	IA#1a	Dec-76	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
6102	Loadin Stacker to Pile C Drop	27.4	NA	2,500,000	20.2.72.202.B.5	Dec-79	■ Existing (unchanged) □ To be Removed
S103	Operation	NA	NA	tpy	IA#1a	Dec-79	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
<b>6101</b>	Loadin Stacker to Pile D Drop		NA	2,500,00	20.2.72.202.B.5	Apr-82	■ Existing (unchanged) □ To be Removed
S104	Operation	NA	NA	tpy	IA#1a	Apr-82	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
0105			NA	NA	20.2.72.202.B.5	Nov-73	■ Existing (unchanged) □ To be Removed
S105	Coal Pile A Wind Erosion	NA	NA	NA	IA#1a	Nov-73	□ New/Additional       □ Replacement Unit         □ To Be Modified       □ To be Replaced
			NA	NA	20.2.72.202.B.5	Dec-76	■ Existing (unchanged) □ To be Removed
S106	Coal Pile B Wind Erosion	NA	NA	NA	IA#1a	Dec-76	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
			NA	NA	20.2.72.202.B.5	Dec-79	■ Existing (unchanged) □ To be Removed
S107	Coal Pile C Wind Erosion	NA	NA	NA	IA#1a	Dec-79	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
			NA	NA	20.2.72.202.B.5	Apr-82	■ Existing (unchanged) □ To be Removed
S108	Coal Pile D Wind Erosion	NA	NA	NA	IA#1a	Apr-82	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
	Coal Pile A to Reclaimer A Drop		NA	1,600,000	20.2.72.202.B.5	Nov-73	■ Existing (unchanged) □ To be Removed
S115	Operation	NA	NA	tpy	IA#1a	Nov-73	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>

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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 <sup>2</sup>	For Each Piece of Equipment, Check On
	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	
S116	Coal Pile B to Reclaimer B Drop	NA	NA	1,600,000	20.2.72.202.B.5	Dec-76	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
5110	Operation	NA	NA	tpy	IA#1a	Dec-76	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
S117	Coal Pile C to Reclaimer C Drop	NA	NA	2,500,000	20.2.72.202.B.5	Dec-79	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
5117	Operation	NA	NA	tpy	IA#1a	Dec-79	□ To Be Modified □ To be Replaced
S118	Coal Pile D to Reclaimer D Drop	NA	NA	2,500,00	20.2.72.202.B.5	Apr-82	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
5110	Operation	1424	NA	tpy	IA#1a	Apr-82	□ To Be Modified □ To be Replaced
S119	Reclaimer A to Conveyor #3A	NA	NA	1,600,000	20.2.72.202.B.5	Nov-73	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
5117	Drop Operation	NA	NA	tpy	IA#1a	Nov-73	□ To Be Modified □ To be Replaced
S120	Reclaimer B to Conveyor #3B	NA	NA	1,600,000	20.2.72.202.B.5	Dec-76	■ Existing (unchanged) □ To be Removed
5120	Drop Operation	NA	NA	tpy	IA#1a	Dec-76	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
6121	Reclaimer C to Conveyor #3C	NA	NA	2,500,000	20.2.72.202.B.5	Dec-79	■ Existing (unchanged) □ To be Removed
S121	Drop Operation	NA	NA	tpy	IA#1a	Dec-79	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
G100	Reclaimer D to Conveyor #3D		NA	2,500,00	20.2.72.202.B.5	Apr-82	■ Existing (unchanged) □ To be Removed
S122	Drop Operation	NA	NA	tpy	IA#1a	Apr-82	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
8127			NA	1600000	20.2.72.202.B.5	Nov-73	■ Existing (unchanged) □ To be Removed
S127	Conveyor 3A to 4A transfer point	NA	NA	tpy	IA#1a	Nov-73	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
0120	Comment 2D to 4D to offer a sint		NA	1600000	20.2.72.202.B.5	Nov-73	■ Existing (unchanged) □ To be Removed
S128	Conveyor 3B to 4B transfer point	NA	NA	tpy	IA#1a	Nov-73	New/Additional       Replacement Unit         To Be Modified       To be Replaced
6120			NA	2500000	20.2.72.202.B.5	Dec-76	■ Existing (unchanged) □ To be Removed
S129	Conveyor 3C to 4A transfer point	NA	NA	tpy	IA#1a	Dec-76	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
G100			NA	2500000	20.2.72.202.B.5	Dec-76	■ Existing (unchanged) □ To be Removed
S130	Conveyor 3D to 4B transfer point	NA	NA	tpy	IA#1a	Dec-76	New/Additional       Replacement Unit         To Be Modified       To be Replaced
			NA	1600000	20.2.72.202.B.5	Dec-79	• Existing (unchanged)
S133	Conveyor 4A to 5A transfer point	NA	NA	tpy	IA#1a	Dec-79	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
6124	Comment (Dite CD to a final state	NI 4	NA	1600000	20.2.72.202.B.5	Dec-79	■ Existing (unchanged) □ To be Removed
S134	Conveyor 4B to 5B transfer point	NA	NA	tpy	IA#1a	Dec-79	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
6125			NA	2500000	20.2.72.202.B.5	Apr-82	■ Existing (unchanged) □ To be Removed
S135	Conveyor 4A to 5C transfer point	NA	NA	tpy	IA#1a	Apr-82	Image: New/Additional       Image: Replacement Unit         Image: To Be Modified       Image: To be Replaced
8126	Commune 4D to 50 torradian	NT 4	NA	2500000	20.2.72.202.B.5	Apr-82	■ Existing (unchanged) □ To be Removed
S136	Conveyor 4B to 5C transfer point	NA	NA	tpy	IA#1a	Apr-82	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>

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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 <sup>2</sup>	For Fach Piece of	Equipment, Check On
omt rumber	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	For Each Free of	Equipment, Check On
S141	Conveyor 5A to Silos 1A,1B,1C	NA	NA	1600000	20.2.72.202.B.5	Dec-76	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5141	& 1D	NA	NA	tpy	IA#1a	Dec-76	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Ont</li> <li>To be Replaced</li> </ul>
S142	Conveyor 5B to Silos 2A,2B,2C	NA	NA	1600000	20.2.72.202.B.5	Nov-73	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5142	& 2D	NA	NA	tpy	IA#1a	Nov-73	<ul> <li>To Be Modified</li> </ul>	<ul> <li>To be Replaced</li> </ul>
S143	Conveyor 5C to Silos 3A,3B,3C	NA	NA	2500000	20.2.72.202.B.5	Dec-79	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3143	& 3D	NA	NA	tpy	IA#1a	Dec-79	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S144	Conveyor 5D to Silos 4A,4B,4C	NA	NA	2500000	20.2.72.202.B.5	Apr-82	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5144	& 4D	NA	NA	tpy	IA#1a	Apr-82	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S406	Ammonium hydroxide water	NA	NA	385	20.2.72.202.B.5	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3400	treatment at Units 3&4	NA	NA	gal/yr	IA#1a	NA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S501	Bottom Ash Truck Loading Unit	NA	NA	47893	20.2.72.202.B.5	Nov-73	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3301	1 bin	NA	NA	tpy	IA#1a	Nov-73	<ul> <li>Rew/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S506	Bottom Ash Truck Loading Unit	NA	NA	56125	20.2.72.202.B.5	Apr-82	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3300	4 bin	NA	NA	tpy	IA#1a	Apr-82	<ul> <li>Rew/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S520	Bottom Ash Transfer Conveyors	NA	NA	71840	20.2.72.202.B.5	Apr-82	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3320	(2) to Unit 1 bin	NA	NA	tpy	IA#1a	Apr-82	<ul> <li>To Be Modified</li> </ul>	<ul> <li>Replacement offit</li> <li>To be Replaced</li> </ul>
S521	Bottom Ash Transfer Conveyors	NA	NA	112250	20.2.72.202.B.5	Apr-82	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3321	(2) to Unit 4 bin	NA	NA	tpy	IA#1a	Apr-82	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S601	Vehicle Diesel Fuel Tank	NA	NA	20000	20.2.72.202.B.5	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3001	Vehicle Dieser Puer Fairk	NA	NA	Gallons	IA #8	NA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S603	Unleaded Vehicle Fuel Tank	NA	NA	20000	20.2.72.202.B.5	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3005	Official vehicle Fuel Talk	NA	NA	Gallons	IA #8	NA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S605	Regular Vehicle Fuel Tank	NA	NA	20000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3003		INA	NA	Gallons	IA #5	NA	<ul> <li>To Be Modified</li> </ul>	<ul> <li>Replacement offit</li> <li>To be Replaced</li> </ul>
S607	Units 1&2 Fuel Oil Storage Tank	NA	NA	420,000	20.2.72.202.B.2	Nov-73	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5007	omis 1&2 Fuel On Storage Talk	INA	NA	Gallons	IA #5	Nov-73	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Onit</li> <li>To be Replaced</li> </ul>
S609	Unit 1 Emerg. Gen Day Tank	NA	NA	5000	20.2.72.202.B.2	Dec-76	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3009	Omt i Emerg. Gen Day fallk	INA	NA	Gallons	IA #5	Dec-76	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Omt</li> <li>To be Replaced</li> </ul>
S610	Unit 2 Emerg. Gen Day Tank	NA	NA	5100	20.2.72.202.B.2	Nov-73	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3010	Unit 2 Emerg. Gen Day Talik	INA	NA	Gallons	IA #5	Nov-73	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced

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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 <sup>2</sup>	For Fach Piece of	Equipment, Check On
	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	FOI Each Fict of	Equipment, Check On
S614	Units 3&4 Fuel Oil Storage	NA	NA	1,054,200	20.2.72.202.B.2	Nov-73	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5014	Tank/Piping	INA	NA	Gallons	IA #5	Nov-73	<ul> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Ont</li> <li>To be Replaced</li> </ul>
S616	Unit 3 Emerg. Gen Day Tank	NA	NA	560	20.2.72.202.B.2	Dec-79	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5010	Olini 5 Elilerg. Gen Day Talik	1124	NA	Gallons	IA #5	Dec-79	□ To Be Modified	<ul> <li>To be Replaced</li> </ul>
S617	Unit 4 Emerg. Gen Day Tank	NA	NA	560	20.2.72.202.B.2	Apr-82	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5017	Olint 4 Eliferg. Gen Day Talik	NA .	NA	Gallons	IA #5	Apr-82	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S618	Cutter Oil Tank	NA	NA	22,680	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3018	Cutter On Talk	INA	NA	Gallons	IA #5	NA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S622	Switchyard Diesel Tank	NA	NA	78	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3022	Switchyard Dieser Fank	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S739	Waste Oil Tank 1	NA	NA	6000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3739	waste Oli Talik I	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S740	Waste Oil Tank 2	NA	NA	6000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3740	waste Oli Talik 2	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S741	Used Oil Tank - Unit 2 & 3	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3741	Breezeway Tank 1	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S742	Used Oil Tank - Unit 2 & 3	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5742	Breezeway Tank 2	NA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S743	Units 1&2 Waste Oil Tank	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3743	Units T&2 Waste On Tank	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S744	Used Oil Tank - Unit 2 & 3	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5744	Breezeway Tank 3	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	□ To be Replaced
S745	Automotive Shop Waste Oil	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
3743	Tank	INA	NA	Gallons	IA #5	NA	<ul> <li>To Be Modified</li> </ul>	□ To be Replaced
S747	Used Oil Tank - Unit 2 & 3	NA	NA	500	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5/4/	Breezeway Tank 4		NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Onit</li> <li>To be Replaced</li> </ul>
S751	Unit 1 & 2 Turbine Lube Oil	NA	NA	6000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5751	Tank 1	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Unit</li> <li>To be Replaced</li> </ul>
S752	Unit 1 & 2 Turbine Lube Oil	NA	NA	6000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>New/Additional</li> </ul>	<ul> <li>To be Removed</li> <li>Replacement Unit</li> </ul>
5132	Tank 2	INA	NA	Gallons	IA #5	NA	<ul> <li>New/Additional</li> <li>To Be Modified</li> </ul>	<ul> <li>Replacement Unit</li> <li>To be Replaced</li> </ul>

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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 <sup>2</sup>	For Each Piece of Equipment, Check Onc
Unit Number	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	For Each Fiece of Equipment, Check Onc
<b>\$</b> 753	Unit 1 & 2 Turbine Lube Oil	NA	NA	6000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3/33	Tank 3	NA	NA	Gallons	IA #5	NA	□ To Be Modified □ To be Replaced
<b>S</b> 754	Unit 3 & 4 Turbine Lube Oil	NA	NA	12000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
5/54	Tank 1	NA	NA	Gallons	IA #5	NA	Image: New Additional     Image: Replacement Onter       Image: Im
S755	Unit 3 & 4 Turbine Lube Oil	NA	NA	12000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3755	Tank 2	INA	NA	Gallons	IA #5	NA	□ To Be Modified □ To be Replaced
S756	Unit 3 & 4 Turbine Lube Oil	NA	NA	12000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3730	Tank 3	NA	NA	Gallons	IA #5	NA	□ To Be Modified □ To be Replaced
S757	Admin Building Emergency	NA	NA	366	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3/3/	Generator Tank	NA	NA	Gallons	IA #5	NA	□ To Be Modified □ To be Replaced
S758	Contractor Diesel Storage Tank	NA	NA	1000	20.2.72.202.B.2	NA	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3738	Contractor Dieser Storage Tank	NA	NA	Gallons	IA #5	NA	□ To Be Modified □ To be Replaced
S809	Limestone Crushing Ball Mill	NA	NA	227000	20.2.72.202.B.5	Mar-98	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
2809	Limestone Crushing Ban Min	NA	NA	tpy	IA#1a	Mar-98	□ To Be Modified □ To be Replaced
S810	Gypsum Conveyor Transfer	NA	NA	429565	20.2.72.202.B.5	Mar-98	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3810	Point	NA	NA	tpy	IA#1a	Mar-98	□ To Be Modified □ To be Replaced
S811	Gypsum Pile Transfer Point	NA	NA	429565	20.2.72.202.B.5	Mar-98	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3011	Gypsum rne Transfer Fonn	INA	NA	tpy	IA#1a	Mar-98	□ To Be Modified □ To be Replaced
S812	Gypsum Pile/Pile Area Wind	NA	NA	NA	20.2.72.202.B.5	Mar-98	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3012	Erosion	INA	NA	NA	IA#1a	Mar-98	To Be Modified     To be Replaced
S814	Gypsum Truck loading	NA	NA	429565	20.2.72.202.B.5	Mar-98	<ul> <li>Existing (unchanged)</li> <li>To be Removed</li> <li>New/Additional</li> <li>Replacement Unit</li> </ul>
3014	Gypsum Truck loading	INA	NA	tpy	IA#1a	Mar-98	Image: New/Additional     Image: Replacement Unit       Image: New/Additional     Image: New/Additional

## 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) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
1A	Boiler Unit 1 Baghouse	Oct-08	РМ	E301	NA	NA
1B	Boiler Unit 1 Wet Scrubbers	Mar-98> Feb-99	SO2	E301	90% ann. avg (min)	CEMS
1C	Boiler Unit 1 ACI Injection	Nov-08	Hg	E301	NA	NA
4A	Boiler Unit 4 Baghouse	Oct-07	РМ	E304	NA	NA
4B	Boiler Unit 4 Wet Scrubbers	Mar-98> Feb-99	SO2	E304	90% ann. avg (min)	CEMS
4C	Boiler Unit4 ACI Injection	Nov-07	Hg	E304	NA	NA
5	Unit 1 Flyash Silo Baghouse	Oct-08	РМ	E518	99.98	Manufacturer Specfications
8	Unit 4 Flyash Silo Baghouse	Apr-82	РМ	E506	99.5	AP-42 AIR018
9	Limestone Silo Baghouse	Mar-98	РМ	E803	99.5	Manufacturer Specfications
10	Unit 1 Activated Carbon Baghouse	Nov-08	РМ	E901	99.98	Manufacturer Specfications
13	Unit 4 Activated Carbon Baghouse	Nov-07	РМ	E904	99.98	Manufacturer Specfications
14A	Boiler Unit 1 SNCR Injection	1/27/2016	NOx	E301	NA	Manufacturer Specfications
14B	Boiler Unit 4 SNCR Injection	1/27/2016	NOx	E304	NA	Manufacturer Specfications
15	Building Enclosure	Mar-98	РМ	E201, E202, E203	80	EPRI Report
16	Drift Eliminators/Cooling Tower Design	Various	РМ	E406, E409, E410	NA	Manufacturer Specfications
17	Moisture Control (Bulk Unloading)	Various	РМ	E507, E510	NA	AP-42 Section 13.2.4 Equation
18	Watering	NA	РМ	E707	50	EPRI Report
19	Unpaved Roads	NA	РМ	E702, E704-B	35.9	MRI Report Equation
20	Unpaved Haul Roads	NA	РМ	E703, E706	92.2	MRI Report Equation

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Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
21	Paved Roads	NA	РМ	E701, E705, E708, E1003	38	MRI Report Equation
22	Urea Silo Baghouse	1/14/2016	РМ	E905	99.98	Manufacturer Specfications
<sup>1</sup> List each co	ntrol device on a separate line. For each control device, list all er	nission units c	ontrolled by the control device.			

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

#### □ 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. 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	С	0	V	DC	S	Dx	PI	M1	PM	[10 <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_2$ S	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
E101, E102, E103, E104, E105	-	-	-	-	-	-	-	-	67.0	38.3	16.7	9.1	1.7	0.91	-	-	-	-
E201	-	-	-	-	-	-	-	-	18.3	80.0	7.02	30.8	0.41	1.79	-	-	-	-
E202	-	-	-	-	-	-	-	-	0.25	1.1	0.12	0.51	0.018	0.077	-	-	-	-
E203	-	-	-	-	-	-	-	-	0.25	1.1	0.12	0.51	0.018	0.077	-	-	-	-
E301	1574	4871	3000	13140	12	48	7213	28480	72778	287360	16739	66093	4437	17550	-	-	0.0044	0.019
E304	2398	7424	2000	8760	19	75	10992	44500	110905	449000	25508	103270	6762	27410	-	-	0.0068	0.030
E406	-	-	-	-	-	-	-	-	9.4	41	2.2	9.6	0.020	0.088	-	-	-	-
E409	-	-	-	-	-	-	-	-	13	55	2.9	13	0.027	0.12	-	-	-	-
E410	-	-	-	-	-	-	-	-	1.3	5.7	0.67	2.9	0.0027	0.012	-	-	-	-
E518	-	-	-	-	-	-	-	-	103	451	36	158	7.0	31	-	-	-	-
E506	-	-	-	-	-	-	-	-	161	705	56	247	11	48	-	-	-	-
E507	-	-	-	-	-	-	-	-	0.36	1.6	0.17	0.74	0.026	0.11	-	-	-	-
E510	-	-	-	-	-	-	-	-	0.56	2.5	0.27	1.2	0.040	0.18	-	-	-	-
E602	6.4	28.2	1.7	7.40	0.028	0.12	0.20	0.86	0.14	0.035	0.14	0.61	0.14	0.61	-	-	-	-
E606	4.1	1.0	5.1	1.3	0.60	0.15	0.11	0.027	0.24	0.060	0.24	0.060	0.24	0.060	-	-	-	-
E607	2.6	0.64	1.5	0.39	0.29	0.071	0.15	0.037	0.089	0.022	0.089	0.022	0.089	0.022	-	-	-	-
E701,E705, E708	-	-	-	-	-	-	-	-	16.1	67.5	3.7	16	0.92	3.8	-	-	-	-
E702,E703, E704-B, E706	-	-	-	-	-	-	-	-	59.2	213.2	12	43	1.2	4.3	-	-	-	-
E704	-	-	-	-	-	-	-	-	0.58	2.1	0.18	0.64	0.018	0.064	-	-	-	-
E707	-	-	-	-	-	-	-	-	3.5	12	1.1	3.8	0.11	0.38	-	-	-	-
E801	-	-	-	-	-	-	-	-	0.28	1.2	0.13	0.58	0.020	0.088	-	-	-	-
E802	-	-	-	-	-	-	-	-	15.9	10.4	2.5	1.6	0.35	0.23	-	-	-	-
E803	-	-	-	-	-	-	-	-	31	135	5.0	22	1.9	8.2	-	-	-	-
E804	-	-	-	-	-	-	-	-	0.047	0.20	0.017	0.075	0.0048	0.021	-	-	-	-

Public Service	e Company of	New Mexico						San Juan	Generating S	tation				Application I	Date: 10/22/2	019	Revision #0	
Unit No.	N	Ox	С	0	VC	C	SC	Dx	PI	M	PM	[10 <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_{2}S$	Lead	
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
E805	-	-	-	-	-	-	-	-	0.093	0.41	0.034	0.15	0.0097	0.042	-	-	-	-
E901	-	-	-	-	-	-	-	-	46	0.34	16	0.12	3.1	0.023	-	-	-	-
E904	-	-	-	-	-	-	-	-	46	0.58	16	0.20	3.1	0.040	-	-	-	-
E905	-	-	-	-	-	-	-	-	63	24	22	8.6	4.3	1.7	-	-	-	-
Totals	3985	12325	5008	21909	32	123	18205	72981	184339	738211	42449	169933	11235	45061	-	-	0.011	0.049

<sup>1</sup>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 PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

## 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<sup>-4</sup>).

Unit No.	N	Ox	C	0	V	DC	SC	Ox	PI	$M^1$	PM	[ <b>10</b> <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_2S$	Le	ad
	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
E101, E102, E103, E104, E105	-	-	-	-	-	-	-	-	67.0	38.3	16.7	9.1	1.7	0.91	-	-	-	-
E201	-	-	-	-	-	-	-	-	3.7	16	1.4	6.2	0.082	0.36	-	-	-	-
E202	-	-	-	-	-	-	-	-	0.25	1.1	0.12	0.51	0.018	0.077	-	-	-	-
E203	-	-	-	-	-	-	-	-	0.25	1.1	0.12	0.51	0.018	0.077	-	-	-	-
E301	See Note 1	9425	3000	13140	12	48	See Note 2	4098	56	244	126 (3)	552 <sup>(3)</sup>	126 (4)	552 <sup>(4)</sup>	•	-	0.0044	0.019
E304	See Note 1	7425	2000	8760	19	75	See Note 2	4070	85	371	192 <sup>(3)</sup>	841 (3)	192 (4)	841 (4)	-	-	0.0068	0.030
E406	-	-	-	-	-	-	-	-	9.4	41	2.2	9.6	0.020	0.088	-	-	-	-
E409	-	-	-	-	-	-	-	-	13	55	2.9	13	0.027	0.12	-	-	-	-
E410	-	-	-	-	-	-	-	-	1.3	5.7	0.67	2.9	0.0027	0.012	-	-	-	-
E518	-	-	-	-	-	-	-	-	1.6	7.0	1.6	7.0	1.6	7.0	-	-	-	-
E506	-	-	-	-	-	-	-	-	2.2	9.5	2.2	9.5	2.2	9.5	-	-	-	-
E507	-	-	-	-	-	-	-	-	0.36	1.6	0.17	0.74	0.026	0.11	-	-	-	-
E510	-	-	-	-	-	-	-	-	0.56	2.5	0.27	1.2	0.040	0.18	-	-	-	-
E602	6.4	1.61	1.68	0.42	0.028	0.0070	0.20	0.049	0.14	0.035	0.14	0.035	0.14	0.035	-	-	-	-
E606	4.1	1.0	5.1	1.3	0.60	0.15	0.11	0.027	0.24	0.060	0.24	0.060	0.24	0.060	-	-	-	-
E607	2.6	0.64	1.5	0.39	0.29	0.071	0.15	0.037	0.089	0.022	0.089	0.022	0.089	0.022	-	-	-	-
E701, E705, E708	-	-	-	-	-	-	-	-	10.0	41.9	3.3	13.6	0.80	3.3	-	-	-	-
E702, E703, E704-B, E706	-	-	-	-	-	-	-	-	21.9	78.8	6.7	24	0.67	2.4	-	-	-	-
E704	-	-	-	-	-	-	-	-	0.58	2.1	0.18	0.64	0.018	0.064	•	-	-	-
E707	-	-	-	-	-	-	-	-	1.7	6.2	0.53	1.9	0.053	0.19	•	-	-	-
E801	-	-	-	-	-	-	-	-	0.28	1.2	0.13	0.58	0.020	0.088	•	-	-	-
E802	-	-	-	-	-	-	-	-	15.9	10.4	2.5	1.6	0.35	0.23	-	-	-	-
E803	-	-	-	-	-	-	-	-	0.15	0.67	0.025	0.11	0.0093	0.041	-	-	-	-

Public Serv	vice Company	of New Mexi	со					San Juar	Generating S	Station				Application D	ate: 10/22/20	19	Revision	n #0
Unit No.	N	Ox	C	0	VO	C	SC	Ox	PI	M	PM	[10 <sup>1</sup>	PM	2.5 <sup>1</sup>	H	$_2S$	Le	ad
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
E804	-	-	-	-	-	-	-	-	0.0093	0.041	0.0034	0.015	0.00097	0.0042	-	-	-	-
E805	-	-	-	-	-	-	-	-	0.019	0.082	0.0068	0.030	0.0019	0.0085	-	-	-	-
E901	-	-	-	-	-	-	-	-	0.046	0.00034	0.046	0.00034	0.046	0.00034	-	-	-	-
E904	-	-	-	-	-	-	-	-	0.046	0.00058	0.046	0.00058	0.046	0.00058	-	-	-	-
E905	-	-	-	-	-	-	-	-	0.046	0.018	0.046	0.018	0.046	0.018	-	-	-	-
Totals	-	9429	-	21902	-	123	-	4098		936	-	1496	-	1418	-	-	0.012	0.051

<sup>1</sup> 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).

#### Note 1. There is no unit-by-unit hourly regulatory limit for NOx emissions. The most stringent applicable regulatory limits are as follows:

Units 1,4: 0.45 lbs/MMBtu 3-hour average, rolled hourly, (20.2.32.109 NMAC)

Units 1,4: 0.30 lbs/MMBtu 30-day rolling average (Consent Decree, Permit 0063-M4)

#### Note 2. There is no unit-by-unit hourly regulatory limit for SO<sub>2</sub> emissions. The most stringent applicable regulatory limits are as follows:

Units 1,4: 0.25 lbs/MMBtu 7-day average (Consent Degree, Permit 0063-M4)

Units 1,4: 0.15 lbs/MMBtu 30-day average, rolled daily, voluntary limit incorporated into Permit 0063M6R2

Units 1,4: 0.10 lbs/MMBtu Combined 30-boiler operating day average, rolled daily, (NM RH SIP (March 5, 2014))

Units 1,4: 1.2 lbs/MMBtu 3-hr avg (NSPS 40 CFR 60.43(a)(2))

Note 3: PM10 listed is Total PM10. Emission rates based on 0.032 lbs/MMBty limit. There is no single hour regulatory limit. The most stringent applicable regulatory limits are as follows: Units 1,4 NSR Permit 63-M7 0.034 lbs/MMBtu limit (3 hr avg)

Note 4: PM2.5 listed is Total PM2.5. Emission rates based on 0.032 lbs/MMBty limit. There is no single hour regulatory limit. The most stringent applicable regulatory limits are as follows: Units 1,4 NSR Permit 63-M7 0.034 lbs/MMBtu limit (3 hr avg)

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

□ This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scenduled 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)<sup>1</sup>, 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).

TL. 4 NL	N	Ox	C	<b>CO</b>	V	DC	S	Ox	P	$M^2$	PM	<b>[10<sup>2</sup></b>	PM	$2.5^{2}$	Н	$_{2}S$	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
E301	Note 1	0	0	0	0	0	0	0			0	0	0	0	NA	NA	0	0
E304	Note 1	0	0	0	0	0	0	0			0	0	0	0	NA	NA	0	0
				<u>.</u>														
Note 1: SJGS																		
expressed in																		
lbs/mmBtu. emission rate						nese units.	The maxin	num NOx										
cillission rate	cuming 55	wi ioi mese		. / 108/11111	stu.													
	1			1	[			1										1
																		-
																		<u> </u>
Totals																		

<sup>1</sup> 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.

<sup>2</sup> 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		Ox	C	0	V	C	S	Ox	P	М	PN	110	PN	12.5	□ H <sub>2</sub> S 0	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
																	<u> </u>
																	<u> </u>
	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)	( <b>F</b> )	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
1	E301	V	No	400	127	25171	NA	NA	80.1	20
4	E304	V	No	400	128	38567	NA	NA	62.6	28
5	E518	Н	No	117	Ambient	216	177	NA	35.6	2.5 x 2.5
8	E506	Н	No	70	Ambient	423	347	NA	49.5	3.3
9	E803	Н	No	70	Ambient	423	347	NA	49.5	3.3
10	E901	Н	No	70	Ambient	16.97	9.63	NA	21.6	1.0
13	E904	Н	No	70	Ambient	16.97	9.63	NA	21.6	1.0
14	E905	Н	No	70	Ambient	16.97	9.63	NA	21.6	1.0

#### 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.

	Unit No.(s)	Total			CI	H X HAP o	F	Mer X HAP o	cury		nonia or X TAP		Pollutant e Here or 🛛 TAP	Name	Pollutant e Here or 🛛 TAP		Here	Name Her	Pollutant e
		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
1 (E301)	E301	3.24	14.2	0.95	4.17	2.02	8.83	0.0044	0.019	23.9	104.7								
4 (E304)	E304	4.94	21.7	1.45	6.36	3.07	13.5	0.0068	0.030	36.0	157.8								
	_																		
Tot	als:																		

## 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
1 (\$301)	Coal	San Juan Coal Mine	9,587 Btu/lb avg.	202.6 tons (max)	1,600,000 tons	0.89	22.45
4 (S304)	Coal	San Juan Coal Mine	9,587 Btu/lb avg.	308.8 tons (max)	2,500,000 tons	0.89	22.45
1 (\$301)	Fuel Oil	purchased commercial	134,770 Btu/gal	27,500 gal (max)	920,000 gal	0.05	0.00
4 (S304)	Fuel Oil	purchased commercial	134,770 Btu/gal	41,916 gal (max)	1,380,000 gal	0.05	0.00
Emergency Generators	Fuel Oil	purchased commercial	134,770 Btu/gal		112,500 gal	0.05	0.00

## 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 Stora	age Conditions	Max Storag	e Conditions
Tank No.	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)
			All liquid storage tanks at SJGS are insig	nificant or ex	empt emission so	ources			

### 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- LR below)	Roof Type (refer to Table 2- LR below)			Diameter (M)	Vapor Space (M)	(from Ta	lor ble VI-C)	Paint Condition (from Table	Annual Throughput (gal/yr)	Turn- overs
					(bbl)	(M <sup>3</sup> )			Roof	Shell	VI-C)	(gai/yr)	(per year)
			All l	iquid storage ta	anks at SJGS a	re insignificat	nt or exempt er	mission source	es				

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

Roof Type	Seal Type, W	elded Tank Seal Type	Seal Type, Rive	ted Tank Seal Type	Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-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: $1.00 \text{ bbl} = 0.159 \text{ N}$	$1^3 = 42.0 \text{ gal}$				BL: Black	
					OT: Other (specify)	

	Materi	al Processed		Μ	laterial Produced		
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
Coal	variable	Solid	4,100,000 tpy	Ash	variable	solid	920,450 tpy
Limestone	variable CaCO <sub>3</sub>	Solid	136,200 tpy	Gypsum	hydrated calcium sulfate	solid	361,868 tpy
Activated Carbon	carbon	Solid	591 tpy				
Urea	CO(NH <sub>2</sub> ) <sub>2</sub>	Solid	15,600 tpy				

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

## 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
	Hg	Apex Instruments	XC6000	XC6KEM-292	typically 7 days	1 hr	NA	NA	<1.0 ug/scm
	SO2 (Outlet)	Amtek Thermox Gas Analyzer	9900 RM	ZE-9900-S1369-2	10 sec	15 m	0-500 ppm 0-1500 ppm	NA	<7.5%
	SO2 (Inlet)	Amtek Gas Analyzer	9900	ZE-9900-S1369-1	continuous	15 m	0-5000 ppm	NA	<7.5%
1 (E301)	NOx	Amtek Thermox Gas Analyzer	9900 RM	ZE-9900-S1369-2	10 sec	15 m	0-300 ppm 0-1000 pm	NA	<7.5%
	O2	Amtek Thermox Gas Analyzer	9900 RM	ZE-9900-S1369-2	10 sec	15 m	0-25%	NA	<7.5%
	Opacity	LightHawk Teledyne	560	5601426	10 sec	6 m	0-100%	NA	<7.5%
	Flow	Teledyne	Ultraflow 150	0445 1500558	10 sec	15 m	0-1220 KSCFM	NA	<7.5%
	Hg	Apex Instruments	XC6000	XC6KEM-293	typically 7 days	1 hr	NA	NA	<1.0 ug/scm
	SO2 (Outlet)	Amtek Gas Analyzer	9900 RM	2C-9900-S1127	10 sec	15 m	0-500 0-1500 ppm	NA	<7.5%
	SO2 (Inlet)	Amtek Thermox Gas Analyzer	921	AW-921-S289	continuous	15 m	0 -5000 ppm	NA	<7.5%
4(E304)	NOx	Amtek Thermox Gas Analyzer	9900 RM	2C-9900-S1127	10 sec	15 m	0-300 ppm 0-1000 pm	NA	<7.5%
	02	Amtek Thermox Gas Analyzer	9900 RM	2C-9900-S1127	10 sec	15 m	0-25%	NA	<7.5%
	Opacity	LightHawk Teledyne	560	5601429	10 sec	6 m	0-100%	NA	<7.5%
	Flow	Teledyne	Ultraflow 150	0432 1500xxx	10 sec	15 m	0-1870 KSCFM	NA	<7.5%

### **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
1 (E301)	filter pressure drop	fabric filter in. of water		0-10	as needed	as needed per manufactuer's specification		1hr
4 (E304)	filter pressure drop	fabric filter	in. of water	0-10	as needed	per manufactuer's specification	DAHS/PI	1hr
5 (E518)	filter pressure drop	fabric filter	in. of water	0-6	as needed	per manufactuer's specification	DAHS/PI	1hr
8 (E506)	filter pressure drop	fabric filter	in. of water	0-6	as needed	per manufactuer's specification	DAHS/PI	1hr
9 (E803)	filter pressure drop	fabric filter	in. of water	0-6	as needed	per manufactuer's specification	DAHS/PI	1hr
10 (E901)	filter pressure drop	fabric filter	in. of water	0-4	as needed	per manufactuer's specification	DAHS/PI	1hr
11 (E902)	filter pressure drop	fabric filter	in. of water	0-4	as needed	per manufactuer's specification	DAHS/PI	1hr
12 (E903)	filter pressure drop	fabric filter	in. of water	0-4	as needed	per manufactuer's specification	DAHS/PI	1hr
13 (E904)	filter pressure drop	fabric filter	in. of water	0-4	as needed	per manufactuer's specification	DAHS/PI	1hr
14 (E905)	filter pressure drop	fabric filter	in. of water	3-6	as needed	per manufactuer's specification	DAHS/PI	1hr

### 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 <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	<b>PFC/HFC</b> ton/yr <sup>2</sup>	CO <sub>2</sub> from Urea ton/yr				<b>Total</b> GHG Mass Basis ton/yr <sup>4</sup>	<b>Total</b> <b>CO<sub>2</sub>e</b> ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3	1					
	mage CHC	3,576,485	57	393			2,744				3,579,679	
	CO <sub>2</sub> e	3,576,485	17,032	9,823			2,744					3,606,084
4 (E304)	mass GHG	5,518,987	87	599			2,744				5,522,417	
	CO <sub>2</sub> e	5,518,987	25,954	14,969			2,744					5,562,654
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG								 			
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG					-			 		 	
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e								 	 		
	mass GHG CO <sub>2</sub> e					-						
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e					1						
Total		9,095,472	144	992			5,488				9,102,096	
		9,095,472		24,792			5,488					9,168,738

<sup>1</sup> GWP (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.

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

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

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

<sup>5</sup> CO<sub>2</sub>e 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</u> <u>Summary</u> shall include a brief description of the facility and its processes.

<u>Startup, Shutdown, and Maintenance (SSM)</u> 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 San Juan Generating Station (SJGS) is a two-unit coal fired electric steam generating facility presently operating under NSR Permit 0063-M12 and TV Operating Permit P-062R3M2. With this application, PNM is renewing the TV Operating Permit under regulation 20.2.70.300.B.(2) NMAC.

Each unit consists of a pulverized coal, wall fired, dry bottom boiler. Foster Wheeler manufactured the Unit 1 boiler and Babcock and Wilcox manufactured the Unit 4 boiler. The units are numbered from south to north with Unit 1 the furthest south.

The coal source for SJGS is the nearby San Juan Coal Company's San Juan Mine. The maximum SJGS annual coal usage is 4,100,000 tons per year.

The San Juan Mine delivers coal to SJGS by conveyor. From the main delivery point, SJGS conveyors distribute the coal to the individual units, where it is pulverized and sent to the boilers for combustion. Heat from the combustion process is used to produce superheated steam, which in turn drives steam turbines on each unit. Units 1 and 4 have General Electric turbines. The maximum nominal gross generating capacity for each turbine is:

Unit 1: 370 MW

Unit 4: 560 MW

After the turbines have extracted energy from the steam, the steam is condensed back to liquid phase, using forced draft cooling towers for heat rejection, and recycled back to the boilers.

Raw water used at SJGS is obtained from the San Juan River, approximately 3.5 miles southeast of SJGS. Raw water from the river is pumped to a raw water reservoir near the plant. SJGS includes a complex processing system for boiler water, cooling water and other water treatment to produce water with the required quality and properties. This water treatment system includes systems for treating and recycling water and for disposal of wastewater streams.

Several facility modifications have occurred since the last TV Operating Permit Renewal; however, all of these revisions were incorporated in the TV permit modification P062-R3M2 issued on July 10, 2020. These revisions, under regulations 20.2.72.200.A.(2) NMAC and 20.2.72.219.B(1)(c) NMAC, include the following:

SJGS requested a change to handling bottom ash for Units 1 and 4 from front-end loading of trucks to a conveyor/bin system to load trucks. The technical revision, NSR Permit #0063-M9R2, was issued April 9, 2018 and the new Units 1 and 4 bottom ash systems became fully operational October 2018.

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SJGS requested a change to allow the Force Majeure coal storage pile to be moved and blended with fuel coal by either conveyor system or haul truck. This change was completed in significant permit revision NSR Permit #063-M11 issued September 26, 2018.

SJGS requested a change to allow coal in SJGS coal storage piles A and B to be transported by haul truck to SJGS coal storage piles C and D. This change was completed in significant permit revision NSR Permit #063-M11 issued September 26, 2018.

SJGS requested a change to allow cooling tower concentration to be determined by averaging all measurements taken within each calendar quarter. This change was completed in significant permit revision NSR Permit #063-M11 issued September 26, 2018.

SJGS requested a change to clarify the compliance monitoring method for the fly ash/limestone silo baghouses. This change was completed in significant permit revision NSR Permit #063-M11 issued September 26, 2018.

SJGS replaced Unit 1 emergency generator (Emission Unit E602). This change was completed in significant permit revision NSR Permit #063-M11 issued September 26, 2018.

SJGS requested a change to the annual hours of bulldozer operation for coal pile maintenance, for plant coal storage piles, from 1,000 hours to 1,840 hours, then 2,400 hours per year, and also combines those hours for use on all coal storage piles including the Force Majeure coal pile. These changes were completed in two significant permit revisions, NSR Permit #063-M11 issued September 26, 2018 and NSR Permit #063-M12 issued April 17, 2019.

SJGS requested that the coal pile maintenance hours be recorded and reported on an annual calendar year basis and not a 12-month rolling total. This request resolved any issues that occur at SJGS if many of the coal pile maintenance hours are required within a short time period, because of seasonal and operational factors. When these factors arise, coal pile maintenance may be restricted in order to meet the permit limit based on a 12-month rolling total. Production requirements, coal delivery plans, budgetary restrictions at SJGS are based on the calendar year and coal pile movement and maintenance requirements correspond to these calendar year-based items. This change was completed in significant permit revision NSR Permit #063-M12 issued April 17, 2019.

NSR Permit #0063-M11 lists limits on coal material handling (S145&6/E105 & E702) at 380,000 tons per year. SJGS requested any recording and reporting requirements to show compliance with this condition be based on an annual calendar basis and not a 12-month rolling total. As with the coal pile maintenance, this request will resolve any issues that may occur at SJGS if much of the coal material movement is required within a short time period because of seasonal and operational factors. When these factors arise, coal material movement may be restricted in order to meet the permit limit based on a 12-month rolling total. Production requirements, coal delivery plans, budgetary restrictions at SJGS are based on the calendar year and coal material movement corresponds to these calendar year-based items. This change was completed in significant permit revision NSR Permit #063-M12 issued April 17, 2019.

Removal from the NSR Permit all requirements regarding TSP emission rate limits and any associated conditions. These changes were completed in significant permit revision NSR Permit #063-M12 issued April 17, 2019.

Permit language in Permit Condition A112.B that discusses the status of all "Term Sheet Requirements" was changed to indicate the all permittee requirements of the term sheet have been fulfilled. These changes were completed in significant permit revision NSR Permit #063-M12 issued April 17, 2019.

#### Startup, Shutdown, Maintenance (SSM) Emission Rates

The only specific SSM emission limit permitted for SJGS is for  $NO_X$  emissions during startup of the unit boilers. For Units 1 and 4 the maximum SSM  $NO_X$  emission limit is 0.45 lbs/MMBtu. SJGS shall comply with all other emission limits established for steady state operations even during SSM events.

## **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 change in the facility process as described in previous permit application.

# **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.

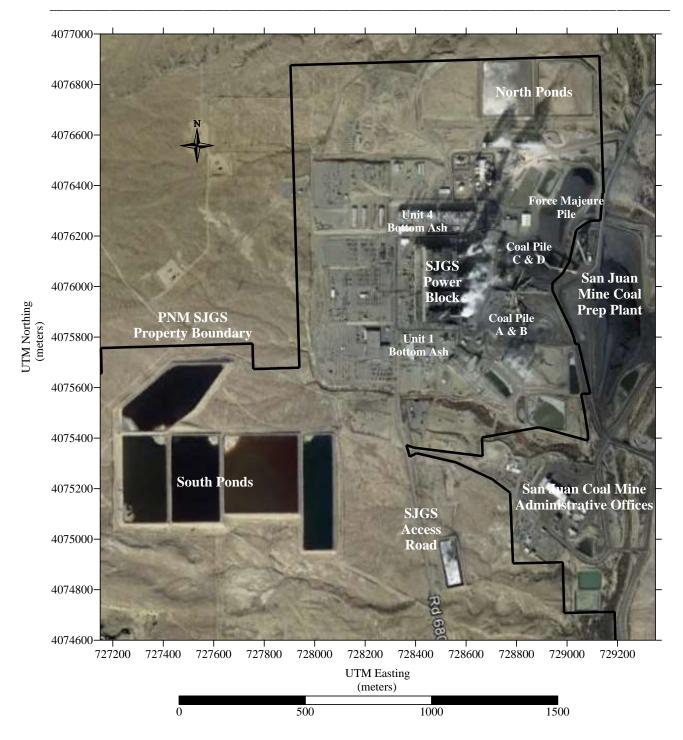


Figure 5-1 PNM SJGS Plant Location Overview - Aerial View

# **All Calculations**

<u>Show all calculations</u> 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.

No change in emission sources or emission rates since issuance of NSR Permit 0063-M12 and TV Operating Permit P-062R3M2 are proposed for this Title V Renewal application. Requested allowable emission rates are summarized in the following tables.

### **Requested Allowable Facility Emission Rates**

		N	Ox	С	0	SC	)2	VC	)C	PM	<b>[10</b> <sup>(1)</sup>	PM	2.5 <sup>(1)</sup>
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr								
E101, E102, E103, E104	Coal Pile Maintenance									14.1	8.46	1.35	0.81
E105	Force Majeure/Coal Piles A&B Coal Handling									2.58	0.66	0.39	0.099
E201	Coal Pulverizers									1.4	6.2	0.082	0.36
E202	Coal Silos to Coal Belt Feeders									0.12	0.51	0.018	0.077
E203	Coal Belt to Coal Pulverizers Transfer Point									0.12	0.51	0.018	0.077
E301	Unit 1 Coal Boiler	(2)	9425	3000	13140	(2)	4098	12	48	126	552	126	552
E304	Unit 4 Coal Boiler	(2)	9423	2000	8760	(3)	4098	19	75	192	841	192	841
E406	Unit 1 Cooling Tower									2.2	9.6	0.020	0.088
E409	Unit 4 Cooling Tower									2.9	13	0.027	0.12
E410	Auxiliary Cooling Tower									0.67	2.9	0.0027	0.012
E518	Unit 1 Fly Ash Silo Loading									1.6	7.0	1.6	7.0
E506	Unit 4 Fly Ash Silo Loading									2.2	9.5	2.2	9.5
E507	Unit 1 Fly Ash Silo Unloading									0.17	0.74	0.026	0.11
E510	Unit 4 Fly Ash Silo Unloading									0.27	1.2	0.040	0.18
E602	Unit 1 Emergency Generator	6.44	1.61	1.68	0.42	0.20	0.049	0.028	0.0070	0.14	0.035	0.14	0.035
E606	Switchyard Emergency Generator	4.1	1.0	5.1	1.3	0.11	0.027	0.60	0.15	0.24	0.060	0.24	0.060
E607	Admin/Data Center Emergency Generator	2.6	0.64	1.5	0.39	0.15	0.037	0.29	0.071	0.089	0.022	0.089	0.022
E701, E705, E708	Vehicle Traffic Paved Roads									3.3	13.6	0.80	3.3
E702, E703, E704-B, E706	Vehicle Traffic Unpaved Roads									6.7	24	0.67	2.4
E704	Front-End Loader around Coal Piles									0.18	0.64	0.018	0.064
E707	Front-End Loader around Gypsum Pile									0.53	1.9	0.053	0.19
E801	Limestone Delivery Truck Unloading									0.13	0.58	0.020	0.088
E802	Limestone Pile Maintenance									2.5	1.6	0.35	0.23
E803	Limestone Silo Loading									0.025	0.109	0.0093	0.041
E804	Limestone Hopper Transfer Point									0.0034	0.015	0.00097	0.0042
E805	Limestone Processing									0.0068	0.030	0.0019	0.0085
E901	Unit 1 Activated Carbon Silo Loading									0.046	0.00034	0.046	0.00034
E904	Unit 4 Activated Carbon Silo Loading									0.046	0.00058	0.046	0.00058
E905	E905 Unit 1 and 4 Urea Silo Loading									0.046	0.018	0.046	0.018
	Total		9428		21902		4098		123		1496		1418

 $(1) \quad PM10 \ and \ PM2.5 \ coal \ fired \ boiler \ emissions \ include \ both \ filterable \ plus \ condensable$ 

(2) There is no unit-by-unit hourly regulatory limit for NOx emissions.

(3) There is no unit-by-unit hourly regulatory limit for  $SO_2$  emissions.

		1											
		CO <sub>2</sub> CO <sub>2</sub> e		Methane CO <sub>2</sub> e		N <sub>2</sub> O CO <sub>2</sub> e		Urea CO <sub>2</sub> e		Total CO <sub>2</sub> e			
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr		
E301	Unit 1 Coal Boiler		3,576,485		9,823		17,032		2,744		3,606,084		
E304	Unit 4 Coal Boiler		5,518,987		14,969		25,954		2,744		5,562,654		
	Total		9,095,472		24,792		42,986		5,488		9,168,738		

### **Requested Allowable GHG Facility Emission Rates**

**Requested Allowable HAPS Emission Rates** 

		Mer	Mercury		Benzene		HCI		HF		Antimony		Arsenic		llium
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr								
E301	Unit 1 Coal Boiler	0.0044	0.019	0.014	0.063	0.95	4.17	2.02	8.83	0.19	0.81	0.0041	0.018	0.000741	0.0032
E304	Unit 4 Coal Boiler	0.0068	0.030	0.022	0.096	1.45	6.36	3.07	13.46	0.28	1.24	0.0062	0.027	0.0011	0.0049
	Total	0.011	0.049	0.036	0.16	2.40	10.53	5.09	22.29	0.47	2.05	0.010	0.045	0.0019	0.0082

**Requested Allowable HAPS Emission Rates** 

		Cadmium		Chromium		Cobalt		Lead		Manganese		Nickel		Selenium	
Unit ID	Unit Description	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
E301	Unit 1 Coal Boiler	0.0011	0.0049	0.010	0.045	0.0030	0.013	0.0044	0.019	0.015	0.065	0.013	0.057	0.019	0.081
E304	Unit 4 Coal Boiler	0.0017	0.0074	0.016	0.069	0.0045	0.020	0.0068	0.030	0.023	0.099	0.020	0.087	0.028	0.12
	Total	0.0028	0.012	0.026	0.11	0.0075	0.033	0.011	0.049	0.037	0.16	0.033	0.14	0.047	0.20
												To	tal HAPs	8.19	35.86

### **Requested Allowable State TAPS Emission Rates**

-		Ammo	onia
Unit ID	Unit Description	lbs/hr	tons/yr
E301	Unit 1 Coal Boiler	23.9	104.7
E304	Unit 4 Coal Boiler	36.0	157.8
	Total	59.9	262.5

# 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<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

## **Calculating GHG Emissions:**

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 <u>Mandatory Greenhouse Gas Reporting</u>.

3. Emissions from routine or predictable start up, shut down, and maintenance must be included.

**4.** Report GHG mass and GHG CO<sub>2</sub>e emissions in Table 2-P of this application. Emissions are reported in <u>short</u> 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  $CO_2$  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)

# **Information Used To Determine Emissions**

#### Information Used to Determine Emissions shall include the following:

- □ If manufacturer data are used, include specifications for emissions units and 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.
- ☐ 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.
- □ 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.

No change in emission sources or emission rates since issuance of NSR Permit 0063-M12 and TV Operating Permit P-062R3M2 are proposed for this Title V Renewal application. No emissions information is provided.

# Map(s)

<u>A map</u> 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	

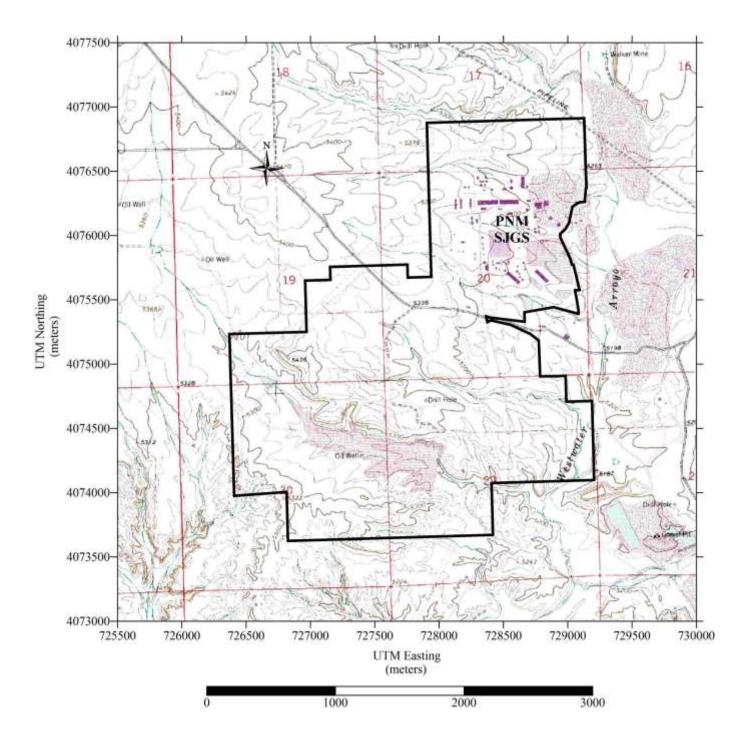


Figure 8-1: Topographical map showing PNM SJGS property boundaries and location of main plant

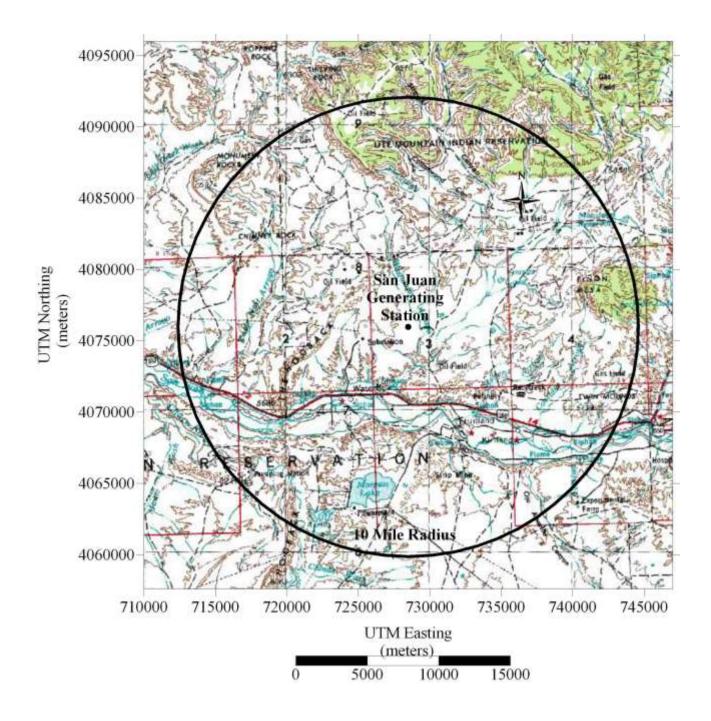


Figure 8-2: Topographical map showing 10-mile radius surrounding PNM SJGS

## **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.  $\Box$  A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
- 2.  $\Box$  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.  $\Box$  A copy of the property tax record (20.2.72.203.B NMAC).
- 4.  $\Box$  A sample of the letters sent to the owners of record.
- 5.  $\Box$  A sample of the letters sent to counties, municipalities, and Indian tribes.
- 6.  $\Box$  A sample of the public notice posted and a verification of the local postings.
- 7.  $\Box$  A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
- 8. 🗆 A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
- 9.  $\Box$  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.  $\Box$  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.  $\Box$  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.

This application is a Title V Renewal. No public notice is required.

## 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.

The San Juan Generating Station (SJGS) is a two-unit coal fired electric steam generating facility. Each unit consists of a pulverized coal, wall fired, dry bottom boiler. Foster Wheeler manufactured the Unit 1 boiler and Babcock and Wilcox manufactured the Unit 4 boiler. The units are numbered from south to north with Unit 1 the furthest south.

The current coal source for SJGS is the nearby San Juan Coal Company's San Juan Mine. Current mining at the San Juan Mine is underground. The maximum SJGS annual coal usage is 4,100,000 tons per year.

Coal from the San Juan Mine is delivered to SJGS by conveyor. From the main delivery point, coal is distributed by conveyors to the individual units, pulverized and sent to the boilers for combustion. Heat from the combustion process is used to produce superheated steam, which in turn drives steam turbines on each unit. Units 1 and 4 have General Electric turbines. The nominal gross generating capacity for each turbine is:

Unit 1: 370 MW Unit 4: 560 MW

The nominal, gross station-wide electrical production capacity is 930 MW.

Like all coal-fired generating stations, numerous subsystems, in addition to the boilers, are required. For SJGS permit applications, emission sources (identified with an S) and emission points (identified with an E) have been labeled with 3-digit numbers grouped as follows:

- 1. Coal handling (100-199)
- 2. Coal pulverizers (200-299)
- 3. Boilers with associated emissions controls (300-399)
- 4. Water Treatment and Cooling Towers (400-499)
- 5. Ash Handling and Dry Sorbent Injection (500-599)
- 6. Emergency Generators (600-699)
- 7. Vehicle Travel, Road Dust, Pile Maintenance (700-799)
- 8. Limestone/Gypsum Handling and Processing (800-899)
- 9. Activated Carbon and Urea/Ammonia Injection System (900-999)
  - 1. Coal Handling: The San Juan Mine delivers coal to SJGS by conveyor to a transfer house. SJSG load-in stackers then distribute the coal to one of four coal piles. Coal from the piles is "reclaimed" through underground reclaimers below each pile which feeds conveyors that send coal to the unit coal silos (4 silos for Unit 1, 6 silos for Unit 4). The silos feed the coal pulverizers by gravity feed. Emission sources associated with coal supply/handling activities include fugitive dust from coal transfer points. Emission controls include chemical dust suppression systems and enclosures. Coal pile maintenance is performed periodically by bulldozers.

Coal stored in the force majeure pile and Coal Piles A and B is transported to Coal Piles C and D. For transporting coal presently stored in Coal Piles A and B, coal is hauled to Coal Piles C and D by 40-ton load haul trucks. For transporting coal presently stored in the force majeure pile, coal is moved in one of two methods; conveyed by hopper and a maximum of sixteen (16) transfer and radial stacker conveyors to Coal Piles C and D or hauled to Coal Piles C and D by 40-ton load haul trucks.

Public Service Company of NM

- 2. Coal Pulverizers: The coal pulverizers are a type of tertiary crusher that grinds coal to the required size for injection into the boiler furnace. Each unit has several identical pulverizers (4 on Unit 1 and 6 on Unit 4). Because the pulverizers are essentially identical, they have been identified in this permit application as a single line entry. Fugitive dust produced by the pulverizers is inherently limited because the pulverizers are a sealed system. Also, the pulverizers are located within the powerblock building, which acts as an enclosure to control any fugitive dust that may be produced.
- 3. Boiler and combustion emission control system: The general process flow is essentially identical for each of the SJGS boilers. Coal from the pulverizers is injected, along with combustion air, into the furnace section of the boiler through a series of burners. Additional air is injected at other locations in the furnace to control the combustion process. The formation of nitrogen oxides during the combustion process is limited through inherent design of the burners (low-NOx burner design) and control of combustion/temperature profile through design of the combustion air system. SJGS boilers include low-NOx burners and use of over-fired air (OFA) to limit the production of NOx during the combustion process.

Thermal energy produced by the combustion process is recovered in a heat exchanger system (boiler tubes) that produces high pressure superheated steam to drive the steam turbines/electrical generators. Because of the high temperatures and pressures, the water circulated through the boiler tubes to produce superheated steam must be treated to produce water of acceptable quality. This high quality water is condensed and recycled back to the boilers.

Non-combustible particulate matter (PM) in the coal (ash) is a by-product of the coal combustion process. Some of the ash (approximately 20 percent) drops out in the boiler and becomes bottom ash. The remainder is entrained in the combustion gases and exits the boiler as "fly ash." SJGS has fabric filters (baghouses) on the boiler units to control fly ash emissions.

The boiler fabric filters (baghouses) are in operation at all times the boiler units are in operation. A built-in bag cleaning system automatically cleans the filter bags without the need to take the entire baghouse off-line. The baghouse is divided into compartments that can be isolated to allow bags to be replaced without taking the entire baghouse off-line. Proper functioning of the fabric filters will be determined by continuous monitoring of the differential pressure across the baghouse and by continuous monitoring the opacity (COMS) of the gas stream exiting the baghouse.

Each of the boiler unit includes an activated carbon injection system for control of mercury emissions. The system consists of activated carbon delivery by truck, storage silos, (one per unit), and injection systems (one per unit) for injecting granular activated carbon into the combustion gases upstream of the baghouse. The activated carbon is intended to enhance mercury removal beyond that which occurs in the baghouse by absorption of mercury onto the activated carbon grains. The injected activated carbon is then removed from the gas stream, along with other particulate matter, by the particulate matter control system.

Each of the boiler unit includes an ammonia (urea solution) injection system for control of nitrogen oxide emissions as part of the SNCR system. The system consists of urea delivery by truck, one storage silo for each unit, and injection systems (one per unit) for injecting ammonia (urea solution) into the combustion gases at strategic locations within the unit boilers, superheaters, and economizers. The ammonia is intended to reduce the formation of nitrogen oxides in the combustion gases when correct temperature is reached.

Combustion gases exiting the fabric filters are then sent through a limestone scrubber system to remove sulfur dioxide. The limestone scrubber system consists of a set of absorbers operated in parallel (3 per unit), which contact the combustion gases with limestone slurry. Chemical reaction of SO<sub>2</sub> and the limestone forms hydrated CaSO<sub>4</sub> (gypsum), which is removed from the scrubbers for disposal along with the ash. Absorbing enhancement agents, mixtures that are generally referred to as di-basic acid, may also be added to the limestone slurry to aide in efficient reaction of SO<sub>2</sub> and limestone. The cleaned combustion gases exit the scrubbers through a demister in each absorber, which helps remove entrained droplets of absorber solution. Each boiler unit has a continuous SO<sub>2</sub> CEMS system on the exit stack downstream of the limestone scrubbers to insure proper functioning of the limestone scrubber system is maintained. Each boiler unit also has an inlet SO<sub>2</sub> CEMS monitor to allow determination of the percent SO<sub>2</sub> removal across the scrubber.

4. Water Treatment/Cooling Towers: Raw water for use at SJGS is obtained from the San Juan River, approximately 3.5 miles southeast of SJGS. Raw water from the river is pumped to a raw water reservoir near the plant. SJGS has a

complex processing system for boiler water, cooling water and other water treatment to produce water with the required quality and properties. This water treatment system includes systems for treating and recycling water and for disposal of wastewater streams. The cooling towers are the only water system process equipment or operations that are potentially a significant air emissions source. Indirect contact heat exchangers are used to condense the steam exiting the steam turbines into the liquid phase to allow recycling back to the boilers. The heat transferred from the steam to the cooling water heats the cooling water, which in turn must be cooled to allow it to be re-used as cooling water. The cooling water is cooled through evaporative cooling in a cooling tower. Efficient evaporation is achieved by contacting the cooling water with ambient air in a cooling tower. This process produced some liquid water droplets which may exit the tower (drift losses) and carry with them dissolved solids (TDS). If these droplets evaporate before they deposit to the ground, the dissolved solids left behind create fugitive particulate matter. The cooling towers at SJGS must operate whenever the boiler units are operating. The amount of cooling tower drift is minimized through cooling tower design which includes "drift eliminators" to minimize the quantity of drift formed.

- 5. Ash Handling: Non-combustible material in the coal (ash) is collected at the bottom of the boilers (bottom ash) and from the fabric filters (fly ash). Water is used to flush bottom ash accumulated in the boilers into ash hoppers and chain conveyors are then used to convey the bottom ash to the bottom ash bins. Fly Ash from the economizer ash hoppers is also conveyed to the bottom ash bins. Bottom ash from the bottom ash bins is loaded directly into trucks, which transport the bottom ash to the adjacent San Juan Mine for disposal. Dry fly ash from the boiler fabric filters (baghouses) is conveyed pneumatically to fly ash storage silos (one per boiler unit). Air vented from the silos during silo loading process exits the silos through a fabric filter baghouse (bin vent filter) on each silo. Differential pressure sensors on each ash silo baghouse are monitored to insure proper functioning of these filters. A portion of the fly ash collected is sent to a Salt River Materials Group (SRMG) fly ash recycling facility, co-located at SJGS and operating under a separate air quality permit. SRMG processes the fly ash and transports the processed fly ash off-site for use in various aggregate, construction and building materials. Ash transfer to the trucks is a potential source of fugitive dust emissions. The portion of the fly ash that cannot be recycled for use is transferred (at each fly ash silo) into trucks that transport the fly ash to the San Juan Mine for disposal.
- 6. Emergency Generators: SJGS has six emergency generators (one for each boiler unit, one at the electrical switchyard, and one at the admin/data center) to provide power to those loads that are necessary for protection of equipment and personnel during a total loss of station and off-site power. These generators operate for less than 500 hours per year (including periodic testing) and are therefore exempt emission sources per 20.2.72.202.B(3).
- 7. Vehicle Travel, Pile Maintenance: Vehicle travel on both paved and unpaved roads has the potential to produce fugitive dust emissions. Vehicles, such as front-end loaders, used to maintain coal and limestone piles may also produce fugitive dust. Vehicle travel includes travel on haul roads used to transport ash and gypsum to the San Juan Mine for disposal. Other vehicle traffic includes truck delivery of limestone and activated carbon and a variety of light and medium duty transport and maintenance vehicles that operate on both paved and unpaved roads. A detailed listing of the vehicle categories along with estimates of annual VMT (vehicle miles traveled for each category) is given in Section 6.
- 8. Limestone and Gypsum Handling: Limestone used to make the limestone slurry for the SO<sub>2</sub> absorbers is delivered to SJGS by truck. The trucks deliver the limestone (which has been crushed prior to delivery) to a limestone pile or directly to a hopper. The hopper feeds a conveyor which transports the limestone to a silo. Air from the silo is vented through a fabric filter (baghouse). The differential pressure across the limestone silo baghouse is monitored to insure proper functioning of the baghouse. From the silo, limestone drops onto a weigh belt, is mixed with water and sent to a ball mill where it is processed into slurry to be sent to the absorbers. The limestone transfer operations at the pile, hopper and weigh belt can potentially produce fugitive dust.

The reacted limestone (gypsum) from the absorbers is dewatered and sent to a gypsum storage pile. Gypsum from the pile is loaded into trucks by front-end loader and the trucks transport the gypsum to the San Juan Mine for disposal.

9. Activated Carbon Injection System: The activated carbon injection (ACI) system is used to inject activated carbon into the boiler combustion gas stream ahead of the boiler fabric filters to control mercury emissions. Activated carbon is delivered to SJGS by truck. The activated carbon is loaded into storage silos (one for each boiler unit) pneumatically. Each storage silo is equipped with a fabric filter (baghouse) to control PM from air venting from the silo. The differential pressure across each baghouse is monitored to insure proper functioning of the baghouse. Following each silo is an injection system that pneumatically injects the granular activated carbon ahead of the boiler fabric filters. The quantity of activated carbon injected is a very small fraction of the total PM load to the boiler

fabric filters that removes the activated carbon from the combustion gases at the same time it removes fly ash. The used activated carbon is transported, along with the fly ash, to the adjacent San Juan Mine for disposal.

- 10. Urea Storage and Ammonia Injection System (SNCR): The ammonia injection system is used to inject ammonia (urea solution) into the combustion gases at strategic locations within Units 1 and 4 boilers, superheaters, and economizers to reduce the formation of nitrogen oxide emissions. Urea is delivered to SJGS by truck. The urea is loaded into a storage silo pneumatically. The storage silo is equipped with a fabric filter (baghouse) to control PM from air venting from the silo. The differential pressure across each baghouse is monitored to insure proper functioning of the baghouse. Urea is then meters and mixed with water to create a 50% urea solution which is injected into each unit.
- 11. Force Majeure Coal Pile and Coal Piles A and B Recovery: For the force majeure coal pile, SJGS will either transport the coal by haul truck or conveyor system. For coal piles A and B, SJGS will transport the coal by haul truck. All coal from the force majeure coal pile and coal piles A and B will be transported to coal piles C and D for blending to be used as fuel for Units 1 and 4.

#### **Process Bottlenecks:**

The overall design of the boilers, steam production/heat rejection systems and the systems that deliver fuel to the boilers are the limiting factors on the amount of coal that can be combusted at SJGS. The maximum amount of coal that can be combusted for each unit is:

Unit 1: 1,600,000 tpy Unit 4: 2,500,000 tpy

# Section 11 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</u> <u>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):

- Public Service Company of New Mexico, San Juan Generating Station
- Westmoreland's San Juan Coal Company, San Juan Coal Mine

## **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 ■ No

<u>Common</u> <u>Ownership</u> <u>or</u> <u>Control</u>: Surrounding or associated sources are under common ownership or control as this source.

□ Yes ■ No

<u>Contiguous or Adjacent</u>: Surrounding or associated sources are contiguous or adjacent with this source.

■ Yes □ No

### C. Make a determination:

- 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, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.
- □ The source, as described in this application, <u>does not</u> 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):

Although the San Juan Generating Station (Plant) and the San Juan Coal Mine (Mine) are located on contiguous properties, and although the Mine could be considered to be a "support facility" for the Plant, the Plant and the Mine are not under "common control" or the same 4 digit SIC code and therefore constitute separate major stationary sources under the Clean Air Act, the New Mexico Air Quality Control Act, and the federal and state regulations implementing those statutes

## Section 12.A PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

**A PSD applicability determination for all sources**. 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 EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

- A. This facility is:
  - $\square$  a minor PSD source before and after this modification (if so, delete C and D below).
  - $\square$  a major PSD source before this modification. This modification will make this a PSD minor source.
  - an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
  - $\square$  an existing PSD Major Source that has had a major modification requiring a BACT analysis
  - $\square$  a new PSD Major Source after this modification.
- B. This facility is one of the listed 20.2.74.501 Table I PSD Source Categories. The "project" emissions for this modification are less than PSD significant emission rates listed in 20.2.74.501 Table 2.

	Allowable Emissions Rates
Pollutant	tons per year
PM 10 Total (Filterable + Condensable)	1,496
PM 2.5 Total (Filterable + Condensable)	1,418
Sulfur Dioxide (SO <sub>2</sub> )	4,098
Nitrogen Oxides (NO <sub>x</sub> )	9,428
Carbon Monoxide (CO)	21,902
Volatile Organic Compounds (VOC)	123
Total sum of all Hazardous Air Pollutants (HAPs)	35.9
Green House Gas Emissions as Total CO2e	9,168,738

- C. Netting is not required. This is a Title V Operating Permit Significant Renewal.
- D. BACT is not required. This is a Title V Operating Permit Significant Renewal.
- E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

This is a Title V Operating Permit Significant Renewal.

# **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.

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

## Table for Applicable STATE REGULATIONS:

STATE REGU- LATIONS CITATION	Title	Applies to <b>Entire</b> Facility	Applies to <b>Unit</b> <b>No(s).</b>	Federally Enforce- able	Does Not Apply	<b>JUSTIFICATION:</b> Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m <sup>3</sup> , 3. VOL)
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	X	N/A	х	N/A	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
20.2.7 NMAC	Excess Emissions	Х	N/A	Х	N/A	All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation. Also listed as applicable in NSR Permit NM063M8R4.
20.2.14 NMAC	Particulate Emissions from Coal Burning Equipment	N/A	E301, E304	X	N/A	Limits PM emissions from main boiler stacks. 0.05 lb PM/MMBtu (3-hr avg) OR 0.02 lb PM2/MMBtu (E301, E304).
20.2.31 NMAC	Coal Burning Equipment - Sulfur Dioxide	N/A	E301, E304	Х	N/A	Limits SO2 emissions from main boiler stacks. 13,000 lbs/hr (combined, 3-hr avg); 0.55 lb MMBtu (30-day avg); 1.2 lbs/MMBtu (3-hr avg. E301, E304).
20.2.32 NMAC	Coal Burning Equipment: NO <sub>2</sub>	N/A	E301, E304	Х	N/A	Limits NOx emissions from main boiler stacks. 0.45 lb/MMBtu (3-hr avg E301, E304).
20.2.61 NMAC	Smoke and Visible Emissions	N/A	E602, E603, E604, E605, E606, E607	Х	N/A	The SJGS are exempt/insignificant sources, but still must meet opacity limits per 20.2.61 NMAC.
20.2.70 NMAC	Operating Permits	X	N/A	Х	N/A	Source is major for NOx, CO, VOCs, SO <sub>2</sub> , and Total HAPs.
20.2.71 NMAC	Operating Permit Fees	X	N/A	X	N/A	Yes, this facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Х	N/A	Х	N/A	This facility is subject to 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	X	N/A	х	N/A	SJGS is a 20.2.72 NMAC permitted sources and is required under 20.2.73.300 NMAC to follow emission inventory reporting requirements.
20.2.75 NMAC	Construction Permit Fees	X	N/A	X	N/A	This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance	N/A	E301, E304; E602, E607, E803, E804, E805	X	N/A	This is a stationary source which is subject to the requirements of 40 CFR Part 60.
20.2.78 NMAC	Emission Standards for HAPS	X	N/A	Х	N/A	This facility emits hazardous air pollutants which are subject to the requirements of 40 CFR Part 61, as amended through December 31, 2010.

STATE REGU- LATIONS CITATION	Title	Applies to <b>Entire</b> Facility	Applies to <b>Unit</b> <b>No(s).</b>	Federally Enforce- able	Does Not Apply	<b>JUSTIFICATION:</b> Identify the applicability criteria, numbering each (i.e. 1. Post 7/23/84, 2. 75 m <sup>3</sup> , 3. VOL)
20.2.82 NMAC	MACT Standards for source categories of HAPS	N/A	E301, E304 E602, E606, E607	Х	N/A	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63, as amended through August 29, 2013.
20.2.84 NMAC	Acid Rain Permits	N/A	E301, E304	Х	N/A	Requires SJGS to have an acid rain permit for the coal boiler units.

## Table for Applicable FEDERAL REGULATIONS:

FEDERAL REGU- LATIONS CITATION	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION:
40 CFR 50	NAAQS	Х	N/A	Х	N/A	Defined as applicable at 20.2.70.7.E.11, any national ambient air quality standard.
NSPS 40 CFR 60, Subpart A	General Provisions	N/A	E301, E304; E602, E607, E803, E804, E805	X	N/A	Applies if any other NSPS subpart applies.
NSPS 40 CFR60 Subpart D	Electric Utility Steam Generating Units	N/A	E301, E304	Х	N/A	Establishes NOx , SO2, PM (Method 5), and opacity limits of boiler units 1 and 4. NOx limit is 0.7 lb/MMBtu (3-hr avg); SO2 limit is 1.2 lb/MMBtu (3-hr avg); and PM 0.1 lb/MMBtu (3-hr avg).
40 CFR 60, Subpart OOO	Non-metallic Minerals	N/A	E803, E804, E805	Х	N/A	NSPS standards for non-metallic minerals apply to certain portions of the limestone handling system.
40 CFR 60 Subpart IIII	Stationary Compression Ignition Internal Combustion Engines	N/A	E602, E607	Х	N/A	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE).
MACT 40 CFR 63, Subpart A	General Provisions	N/A	E301, E304 E602, E606, E607	X	N/A	Applies if any other subpart applies.
MACT 40 CFR 63 Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines (RICE MACT)	N/A	E602, E606, E607	X	N/A	Facilities are subject to this subpart if they own or operate a stationary RICE, except if the stationary RICE is being tested at a stationary RICE test cell/stand.
MACT 40 CFR 63, Subpart UUUUU	Mercury and Air Toxic Rule	N/A	E301, E304	х	N/A	This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from coal-fired electric utility steam generating units (EGUs). This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.
NESHAPS 40 CFR 64	Compliance Assurance Monitoring	N/A	E301, E304	Х	N/A	CAM applies to boiler units because they are each major emission sources (>100 tpy) and employ control equipment to insure compliance with emission limits.
NESHAPS 40 CFR 68	Chemical Accident Prevention	Х	N/A	Х	N/A	SJGS is potentially subject to chemical accident prevention assessment and planning.

FEDERAL REGU- LATIONS CITATION	Title	Applies to <b>Entire</b> Facility	Applies to Unit No(s).	Federally Enforce- able	Does Not Apply	JUSTIFICATION:
Title IV – Acid Rain 40 CFR 72, Subparts B,D and I	Acid Rain	N/A	E301, E304	Х	N/A	SJGS coal boiler units and gas turbines are subject acid rain permitting provisions and have an acid rain permit.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	N/A	E301, E304	Х	N/A	SJGS coal boiler units must hold sufficient annual SO2 allowances.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	N/A	E301, E304	Х	N/A	SJGS submits required reports.
40CFR77 Excess Emissions	Excess emissions reporting	N/A	E301, E304	X	N/A	These requirements shall apply to the owners and operators and, to the extent applicable, the designated representative of each affected unit and affected source under the Acid Rain Program.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	Х	N/A	Х	N/A	SJGS is subject to this part for servicing motor vehicles.

# **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 <u>Operational Plan to Mitigate Emissions During Startups</u>, <u>Shutdowns</u>, <u>and Emergencies</u> 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.
- □ 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.
- **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.

# **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: <a href="https://www.env.nm.gov/aqb/permit/aqb\_pol.html">https://www.env.nm.gov/aqb/permit/aqb\_pol.html</a>. 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.

For the force majeure coal pile recovery, there are two options on how this will be accomplished; truck haul or conveyor system.

# Section 16 Air Dispersion Modeling

- 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 (<u>http://www.env.nm.gov/aqb/permit/app\_form.html</u>) 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.	Х
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:

- □ 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.
- 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.

Test Description 2015	Test Date
2015	
Mercury RATA	5/18-5/21/2015
Gas/Flow RATA	
Q1 2015 EPA Method 5i for Particulate Matter, Method 10 for CO	1/13/2015
Q2 2015 EPA Method 5i for Particulate Matter, Method 10 for CO	5/19/2015
	8/6/2015
	11/4/2015
Mercury RATA	01/16,17,19,20/2015
Gas/Flow RATA	5/10-5/12/2015
	1/14/2015
	5/13/2015
	8/5/2015
	11/5/2015
	01/19,20, 21/2015
	5/13/2015
	3/13/2015
	5/20/2015
	8/4/2015
	11/6/2015
	03/9, 10/2015
	12/15-12/18/2015
	1/15/2015
	5/21/2015
	8/4/2015
	12/17/2015
	12/11/2013
	05/18-20/2016
	11/14/2016
	02/09/2016
	05/12/2016
	8/27/2016
	11/8/2016
	02/11-13, 15, 16/2016
	5/16-5/17/2016
	03/09/2016
	05/10/2016
	8/25/2016
	12/6/2016
	03/10-12/2016
	5/19/2016
	03/08/2016
	5/13/2016 8/24/2016
	Q2 2015 EPA Method 5i for Particulate Matter, Method 10 for CO Q3 2015 EPA Method 5i for Particulate Matter, Method 10 for CO Q4 2015 EPA Method 5i for Particulate Matter, Method 10 for CO Mercury RATA

	Q4 2016 EPA Method 5i for Particulate Matter, Method 10 for CO	11/9/2016
4	Mercury RATA	02/12-15/2016
Т	Gas/Flow RATA	12/7-12/20/2016
	Q1 2016 EPA Method 5i for Particulate Matter, Method 10 for CO	02/10/2016
	Q2 2016 EPA Method 5i for Particulate Matter, Method 10 for CO	5/17/2016
	Q3 2016 EPA Method 51 for Particulate Matter, Method 10 for CO	8/26/2016
	Q4 2016 EPA Method 5i for Particulate Matter, Method 10 for CO	12/20/2016
	2017	12/20/2010
1	Mercury RATA	2/20-2/22/2017
•	Gas/Flow RATA	12/18-12/20/2017
	Q1 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	2/15/2017
	Q2 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	6/13/2017
	Q3 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	8/22/2017
	Q4 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	12/18-12/19/2017
2	Mercury RATA	3/27-3/30/2017
_	Gas/Flow RATA	5/10-5/13/17
	Q1 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	3/27/2017
	Q2 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	6/14/2017
	Q3 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	8/23/2017
	Q4 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	11/30/2017
3	Mercury RATA	2/18/2017
	Gas/Flow RATA	5/14/2017
	Q1 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	3/9/2017
	Q2 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	5/11/2017
	Q3 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	8/25/2017
	Q4 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	11/29/2017
4	Mercury RATA	3/7-3/8/2017
	Gas/Flow RATA	12/22/2017
	Q1 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	2/17/2017
	Q2 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	6/15/2017
	Q3 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	8/24/2017
	Q4 2017 EPA Method 5i for Particulate Matter, Method 10 for CO	12/21/2017
	2018	
1	Mercury RATA	3/6-3/8/2018
	Q1 2018 EPA Method 5i for Particulate Matter, Method 10 for CO	3/1/2018
	Q2 2018 Did Not Test Unit Outage	n/a
	Q32018 EPA Method 5i for Particulate Matter, Method 10 for CO	9/27/2018
	Two Load Gas Flow RATA	9/11/2018
	Q42018 EPA Method 5i for Particulate Matter, Method 10 for CO	11/27/2018 &
		12/13/2018
4	Mercury RATA	3/27-3/29/2018
	Two Load Gas Flow RATA	2/22/2018
	Q1 2018 EPA Method 5i for Particulate Matter, Method 10 for CO	2/27-2/28/2018 & 3/2/2018
	Q2 2018 EPA Method 5i for Particulate Matter, Method 10 for CO	6/25/2018
	Q3 2018 EPA Method 5i for Particulate Matter, Method 10 for CO	9/10/18 & 9/27/2018
	Q42018 EPA Method 5i for Particulate Matter, Method 10 for CO	11/28/2018 & 12/11/2019
	Gas Flow RATA	12/12/2018
	2019	
1	Mercury RATA	2/12-2/14/2019
	Q1 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	2/12/2019
	Q2 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	6/4/2019
	Q3 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	8/27/2019
	Gas RATA	8/28/2019
	Two Load Flow RATA	8/28/2019
	I WU LUAU FIUW KATA	0/20/2019

	Q4 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	11/12/2019
4	Mercury RATA	2/20-2/22/19
	Two Load Gas Flow RATA	3/28/2019
	Q1 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	2/19/2019-2/20/2019
	Q2 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	6/5/2019
	Q3 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	9/17/2019
	Two Load Flow RATA	9/18/2019
	Q4 2019 EPA Method 5i for Particulate Matter, Method 10 for CO	12/4/2019
	Gas RATA	12/5/2019
	2020	
1	Q1 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	2/24/2020
	Mercury RATA	2/25-2/27/2020
	Q2 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	6/23/2020
	Q3 2020 EPA Method 5i for Particulate Matter, Method 10 for CO, CPM	8/12/2020
	Two Load Flow and Gas RATA	8/13/2020
	Q4 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	11/3/2020
4	Q1 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	3/24/2020
	Mercury RATA	4/21-4/22/2020
	Q2 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	6/24/2020
	Three Load Flow RATA	6/25/2020
	Q3 2020 EPA Method 5i for Particulate Matter, Method 10 for CO, CPM	8/11/2020
	Q4 2020 EPA Method 5i for Particulate Matter, Method 10 for CO	11/4/2020
	Two Load Flow and Gas RATA	11/5/2020

## **Requirements for Title V Program**

Do not print this section unless this is a Title V application.

#### Who Must Use this Attachment:

\* Any major source as defined in 20.2.70 NMAC.

- \* Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
- \* Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See <u>http://www.env.nm.gov/aqb/index.html</u>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.

\* Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.

### 19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

CAM Plan is attached.

### **19.2** - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

San Juan has previously reported in quarterly and semi-annual reports the following permit deviations in 2020:

- February 9, 2020: ACI feed rate for Unit 4 fell below the required 0.15 lbs/Macf (0.117).
- March 29-30, 2020 (CAM Plan deviation): Unit 1 Fabric filter average differential pressure exceeded 10 inches water column (10.5 to 10.7) between 3/29 @2200 to 3/30@0759. A pulse valve malfunctioned on BH compartment no. 3 pulse jet header; the valve diaphragm was replaced.
- April 9-10, 2020 (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 4/9 @ 21:00 to 4/10 @ 00:59. This is a deviation of the facility CAM plan. High ash level due to damp ash not conveying & accumulating in the hopper.

- June 5, 2020 (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 13:00-19:59. Elevated boiler back-pressure.
- June 23, 2020 (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 10:00-12:59. Elevated air flow necessary for combustion optimization.
- July 23, 2020 (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 14:00-15:59. Elevated boiler back-pressure.
- July 27, 2020 (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 21:00-21:59. Elevated boiler back pressure.
- August 31, 2020: ACI feed rate for Unit 4 fell below the required 0.15 lbs/Macf (0.04).
- September 5, 2020 air permit (CAM Plan deviation): Unit 1 fabric filter differential pressure exceeded 10 inches water column between 21:00-22:59.

All previous permit deviations have been reported and addressed.

The most recent annual compliance certification was signed on January 28, 2020 and submitted to the NMED and EPA.

### **19.3 - Continued Compliance** (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

San Juan Generating Station will remain in compliance with all applicable requirements identified in this permit application, unless those requirements are revoked by Congress, the Administrator or the Department, or revised or reinterpreted by Congress, the Administrator or the Department so as to be no longer applicable to San Juan Generating Station. San Juan Generating Station will, in a timely manner, comply with all applicable requirements that may be created by new rules that become effective during the permit term. Compliance with any new requirements will be achieved within the schedule expressly required by the applicable requirement. If required, the 20.2.70NMAC permit will be updated, modified or supplemented according to the procedures of 20.2.70NMAC or according to specific procedures included in the new applicable requirement.

## **19.4** - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

SJGS proposes to continue the current schedule for submitting annual compliance certifications for the January 1 through December 31 period of each year by January 30 of the following year.

## 19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? ■ Yes □ No

2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ■ Yes □ No

(If the answer is yes, describe the type of equipment and how many units are at the facility.)

- 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? Yes □ No
- Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)

### **19.6** - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

- **A.** Description of Compliance Status: (20.2.70.300.D.11.a NMAC) A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.
- **B.** Compliance plan: (20.2.70.300.D.11.B NMAC) A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.
- C. Compliance schedule: (20.2.70.300D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

#### D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

**E.** Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

**NOTE**: The Acid Rain program has additional forms. See <u>http://www.env.nm.gov/aqb/index.html</u>. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

Not applicable. SJGS is in compliance with applicable requirements.

## 19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

SJGS is not subject to 112(r).

### 19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

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 NMAC)?

(If the answer is yes, state which apply and provide the distances.)

Colorado 21.90 km, Arizona 54.4 km, Navajo Reservation 3.7 km, Southern Ute Reservation 30.6 km, Ute Mtn. Ute Reservation 4.7 km.

### **19.9 - Responsible Official**

Provide the Responsible Official as defined in 20.2.70.7.AD NMAC:

Mr. Sky Northup Director, Plant Management I P.O. Box 227, Waterflow, NM 87471 Sky.Northup@pnm.com (505) 598-7570

## **Compliance Assurance Monitoring Plan**

prepared in support of the

# San Juan Generating Station P062R4

## **OPERATING PERMIT MODIFICATION APPLICATION**

Submitted by

Public Service Company of New Mexico

November 2020

## **Compliance Assurance Monitoring Plan**

prepared in support of the

## San Juan Generating Station P062R4

## OPERATING PERMIT MODIFICATION APPLICATION

## Introduction

SJGS operates under Title V Operating Permit P062-R3-M2. Operating Permit P062-R3-M2 was issued on July 7, 2020. This permit P062-R3-M2 will expire on November 10, 2021. No change to the existing CAM Plan is proposed with this Title V Renewal Application.

SJGS uses CEMS to determine compliance with SO2 and NOx emission limits and COMS to determine compliance with opacity emission limits. The CEMS for SO<sub>2</sub> and NOx are required under acid rain regulations and, therefore, exempt SO<sub>2</sub> and NOx from CAM requirements. Even if CAM was applicable to SO<sub>2</sub> and NOx, CEMS are considered presumptively acceptable to fulfill all requirements of the 40 CFR 63 CAM rule. COMS are required on all SJGS units per the requirements of SJGS NSR permit 0063-M12. Therefore, this CAM plan addresses PM only.

# A. Control Equipment

**A.1 Filterable Particulate Matter, Boiler Units 1 and 4 (permit units E301 and E304)** – Babcock and Wilcox Fabric Filter (1 fabric filter system per unit).

# B. Applicable Regulations, Emission Limits, Monitoring Requirements

# **B.1 Filterable Particulate Matter**

# Applicable Regulations

20.2.14 NMAC

20.2.70 NMAC (Operating Permit No. P062R3)

20.2.72 NMAC (NSR Permit No. 0063-M12)

40CFR60 Subpart D (Units E301, E304)

## **Emission Limits**

Unit 1 (E301)	Unit 4 (E304)
0.05	0.05
lbs/mmBtu, 3	lbs/mmBtu, 3
hr avg	hr avg
0.1	0.1
lbs/mmBtu, 3-	lbs/mmBtu, 3-
hr avg	hr avg
0.02	0.02
lbs/mmBtu, 30-	lbs/mmBtu, 30-
day average	day average
174.8	266.5
lbs/hr	lbs/hr
0.015	0.015
lbs/hr, 3-hr avg.	lbs/hr, 3-hr avg.
	0.05 lbs/mmBtu, 3 hr avg 0.1 lbs/mmBtu, 3- hr avg 0.02 lbs/mmBtu, 30- day average 174.8 lbs/hr 0.015

# **Monitoring Requirements**

SJGS must perform quarterly compliance tests for PM ( $PM_{10}$  and  $PM_{2.5}$ ) using EPA Methods 1-5, 5i per condition A.402.H of NSR Permit No. 0063-M12.

# C. Monitoring Approach

# C.1 Filterable Particulate Matter

# Indicators

- 1. Visible emissions (opacity) as measured by COMS systems meeting the 40 CFR60 Performance Specification One and located in the fabric filter outlet duct from each unit (per an Alternative Monitoring Plan submitted to EPA).
- 2. Differential pressure drop across the fabric filter on each unit.
- 3. By-pass damper position (open/closed) indicator.

# Measurement Approach

- 1. The COMS system is operated per the procedures specified in 40 CFR 60 Subpart D.
- 2. Differential pressure (in inches of water) is measured across each fabric filter system with a continuous monitoring system averaged over 1-minute periods.
- 3. Limit switches on the by-pass damper indicate the open/closed status to the plant DCS (Distributed Control System) system.

# Indicator Ranges

**Indicator 1** – An excursion is defined as a condition when the average opacity exceeds 10 percent for any consecutive 3-hr period.

**Indicator 2** – An excursion is defined as a condition when the fabric filter average differential pressure exceeds 10 inches water column (w.c) for any consecutive 3-hr period.

**Indicator 3** – An excursion is defined as a condition when the by-pass damper is in the open position any time when the boiler is in operation.

# **Corrective Action Thresholds**

If any indicator range is exceeded, SJGS personnel and/or their consultants or subcontractors will initiate an evaluation of the fabric filter and associated instrumentation no later than the end of the next regular business day after the time of discovery of the excursion period. This evaluation will include one or more of the following as needed to determine the cause of the excursion:

- Evaluation of opacity monitor or monitors indicating high values.
- Evaluation of the differential pressure drop measurement instruments indicating high values.
- Evaluation of operating data relevant to fabric filter system air pulse cleaning system for the affected fabric filter.
- Evaluation of access hatches and physical integrity of ducts and fabric filter equipment for the affected fabric filter system.
- Evaluation of fabric filter solids handling equipment for the affected system.
- Internal inspections of the affected fabric filter system/compartments including bag integrity, potential leaks as necessary.

If the evaluations initiated by an excursion of any indicator range indicate that corrective action is necessary, SJGS will implement corrective action as soon as practicable to minimize possible deviations from filterable particulate matter emission limits.

# **D.** Monitoring Data Performance Criteria

**PM Indicator 1** – The opacity monitors installed in the duct between the fabric filters and the  $SO_2$  absorbers on each unit are at locations that provide representative measurements of the opacity in the duct. The locations have been approved in an Alternative Monitoring Plan submitted by SJGS to the EPA. The opacity monitor locations provide measurement at a location free of condensed water droplets that could interfere with accurate opacity determination. The opacity monitors are sited at locations where the beam passes through the centroid area of the ducts and meets siting criteria regarding distances from flow disturbances.

**PM Indicator 2** – The differential pressure drop transmitters are located at appropriate locations as determined by the fabric filter manufacturer to provide accurate pressure drop measurement data across the fabric filter system.

**PM Indicator 3** – There are only two possible conditions of the by-pass damper – open or closed. In the open or closed position, the damper actuates contact switches that indicate the position.

The performance of the monitoring instruments providing indicator data are verified in accordance with the requirements of 40 CFR63(b)(2).

**PM Indicator 1**- The installed COMS meet the design specifications of 40 CFR 60 Performance Specification One. The installed COMS meet the following field audit performance specifications.

- $\circ$  The calibration error <= 2 percent opacity for each of the calibration attenuators.
- The COMS upscale and downscale response times are <10 seconds as measured in the COMS data recorder.
- The COMS data recorder averages and records each calibration attenuator value within +/- 2% opacity of the certified value of the attenuator.
- The COMS are capable of measuring and recording opacity and perform daily calibration drift assessments for 176 hours without unscheduled maintenance, repair or adjustment.

**PM Indicator 2** – The fabric filter differential pressure transmitters will be calibrated by plant personnel every two years using an electronic calibrator.

**PM Indicator 3** – The damper contact switches will be checked by plant personnel once per year by visually examining the physical damper position (open and closed) and comparing the result to the position indicated by the plant DSC system.

The monitoring instruments used to provide CAM data are subject to routine quality assurance and quality control procedures to insure they provide valid data as required by 40 CFR 64.3(b)(3).

**PM Indicator 1** – Zero level and span level automatic daily calibration drifts will be performed. The zero-level calibration standard will be between 0 and 10 percent of the span value and the span-level calibration will be between 30 and 50 percent of the span value. The COMS zero and upscale calibration drift error will be limited to not greater than 2 percent opacity over a 24-hour period. The zero and span will be adjusted if the daily zero or span drift exceeds two times the specified limit. The optical surfaces will be cleaned if the cumulative automatic zero compensation exceeds 4 percent opacity.

**PM Indicator 2** – The pressure taps are cleaned monthly. The differential pressure transducer is inspected, adjusted and calibrated once per year.

PM Indicator 3 - The bypass limited switches are inspected once per year.

The systems used to measure and monitor all three PM Indicator ranges are in operation at all times (except during periods of instrument calibration and maintenance) the boilers are in operation at each boiler unit.

The opacity monitoring systems on each unit perform one sampling and analyzing cycle at least every successive 10-second period and perform a data recording cycle for each successive 6-minute period. The opacity monitoring systems allow the amount of the zero and span drift to be recorded and quantified.

The differential pressure drop data on each unit are logged at a frequency of at least four times per hour and are integrated to yield one-hour averages as required by 40 CFR 64.3(b)(4).

The status of the bypass limit switches on each unit is recorded at least once per hour by the plant DSC system.

The opacity and differential pressure drop data are evaluated on a 3-hour block average and compared with the indicator ranges.

# E. Rationale for Selection of Performance Indicators

### E1. Justification of Filterable Particulate Matter Indicators and Indicator Ranges

**PM Indicator 1** – Fabric filter operating problems identified by Indicator 1 include, but are not limited to the following:

- Leaks of unfiltered boiler exhaust gas through worn seals or improperly seated bypass duct dampers
- Failure of one or more filter bags in the fabric filter
- Excessive seepage of fine particulate matter through filter bags due to cleaning related problems.

There is no precise relationship between opacity and filterable particulate matter concentration in the boiler exhaust gases. However, opacity is recognized as a primary indicator of proper fabric filter operation. SJGS has confirmed, through quarterly compliance tests that, during normal fabric filter operations, SJGS is in compliance with all PM emission limits. General information available for fabric filters on coal-fired power plants (such as review of CAM plans for other baghouses on other coal fired units) indicates that 10 percent opacity is a typical value that, if exceeded, indicates potential fabric filter problems.

**PM Indicator 2** – Fabric filter operating problems identified by Indicator 2 include, but are not limited to the following:

- Inadequate reverse gas flow due to problems with the bag cleaning system, failure of one or more internal compartment dampers, accumulation of deposits on the bags interior surfaces.
- Localized high air-to-cloth ratio conditions caused by excessive differences in gas flow rates through different compartments or an excessive number of compartments out of service.

This indicator range is based on fabric filter manufacturer specifications and site operational experience. The fabric filter is alarmed to indicate excessive differential pressure if the pressure differential exceeds 10 inches of water. The indicator range pressure is below the pressure that would cause damage to the filter bags or fabric filter system.

**PM Indicator 3** – The bypass dampers should be closed during all routine operation. An open bypass damper during anytime the boilers are in operation on that unit indicates a malfunction condition.

# F. Reporting and Recordkeeping

SJGS will submit monitoring reports to the NMED in accordance with the requirements of 20.2.70 NMAC and 40 CFR 64.7(a) as required in the SJGS Title V Operating Permit.

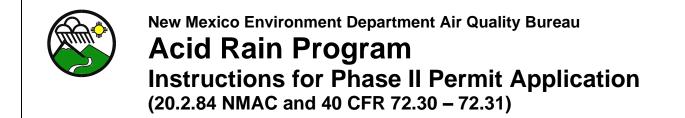
# Section 20

# **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.

No other relevant information.



The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA <u>before</u> the permit application is submitted to the New Mexico Environment Department Air Quality Bureau (NMED/AQB). A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the NMED/AQB either issues a permit to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the New Mexico Environment Department Air Quality Bureau at (505) 476-4300.

- STEP 1 Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 287-1730 (for ORIS codes), or (202) 287-1927 (for facility codes).
- **STEP 2** For column "a," identify each affected unit at the affected source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements.

For columns "c" and "d," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 72.2 and 75.4, respectively.

### **Submission Deadlines**

For new units, an initial Acid Rain permit application must be submitted to the NMED/AQB 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 12 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the NMED/AQB operating permits regulation.

### **Submission Instructions**

Mail this form to:	New Mexico Environment Department Air Quality Bureau 525 Camino de los Marquez, Suite 1
	Santa Fe, NM 87505-1816

Along with this application, include a copy of the Certificate of Representation Form and relevant permitting forms submitted to EPA (ie, Phase II NOx Compliance Plan and Averaging Plan and New Unit Exemption Form).

If you have questions regarding this form, contact the New Mexico Environment Department Air Quality Bureau at (505) 476-4300 or call EPA's Acid Rain Hotline at (202) 343-9620.

### **Paperwork Burden Estimate**

The burden on the public for collecting and reporting information under this request is estimated at 17 hours per response. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. *Do not submit forms to these addresses; see the submission instructions above.* 

Phase II Permit Application, Acid Rain, Version: September 16, 2015

NEW MEXICO ENVIORNMENT DEPARTMENT
AIR QUALITY BUREAU
ACID RAIN PROGRAM
PHASE II PERMIT APPLICATION

For more information, see instructions and refer to 20.2.84 NMAC and 40 CFR 72.30 - 72.31

This submission is:

New X I

Revised

**STEP 1:** Identify the source by plant name, State, and ORIS code.

Plant Name	State	ORIS Code
San Juan Generating Station	N.M.	02451

**STEP 2:** Enter the unit ID# for each affected unit at the affected source in column "A." For new units, enter the requested information in columns "C" and "D."

Α	В	С	D
Unit ID #	Unit will hold Allowances in Accordance with 40 CFR Part 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	YES	Existing Unit	Existing Unit
4	YES	Existing Unit	Existing Unit
	YES		

**STEP 3:** Complete the additional information sheet and provide here or on the attached sheet a brief description of each unit.

# **Description of unit:**

AR Unit 1 (E301): Foster Wheeler pulverized coal, wall-fired, dry bottom boiler – 370 MW AR Unit 1 (E304): Babcock & Wilcox pulverized coal, wall-fired, dry bottom boiler – 560 MW

Applicant: (Facility Owner and Operator)	Name	litional Information Public Service Company of New Mexico ss 2401 Aztec Road NE, Mailstop Z100 Albuquerque, NM 87107 505.241.2016 505.241.2384
Name and Location of Proposed Facility:	Facility Name: San Juan Generating Station Driving Directions: Facility is 3 miles north of US Highway 64 on County Road 6800. Address: County Road 6800 Waterflow, NM 87421	
	Section: Range: Township: Elevation: Latitude: Longitude: UTM Zone: UTMH: UTMV:	16, 17, 18, 19, 20, 21, 29, 30 15W 30N 5,300 ft. 36° 48' 7.4" 108° 26' 19.5" 12 728.50 km 4,075.98 km
SIC Code: (Primary, Secondary)	4911	
<b>Designated Representative</b> ( <b>DR</b> ): (Name, or provide copy of EPA Certificate of Representation form.)	Name Title Company Phone: Email address:	Sky Northup Director of Plant Management I Public Service of New Mexico 505.598.7570 Fax: 505-598-7247 Sky.Northup@pnm.com
Alternate DR:	Name Title Company Phone: Email address:	Curtis McGee Plant Operations Manager Public Service of New Mexico 505.598.7958 Fax: 505-598-7247 Curtis.McGee@pnm.com
Contact Person:	Name Title Company Phone: Email address:	Robin DeLapp Technical Project Manager Public Service of New Mexico 505.241.2016 Fax: 505.241.2384 robin.delapp@pnmresources.com

**STEP 4:** Read the standard requirements and certification, enter the name of the designated representative, sign and date

## Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
  (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  (ii) Have an Acid Rain Permit.

## **Monitoring Requirements**

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

<u>Nitrogen Oxides Requirements</u> The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

### **Excess Emissions Requirements**

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

### **Recordkeeping and Reporting Requirements**

(1)Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2)The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

### **Liability**

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension

### Liability, Cont'd.

plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

### **Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**STEP 5:** Read the certification statement, sign, and date.

### **Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name // //or//cus	
I tume of the total	
Designated Representative or Alternate Representative Signature D	ate 10-22-2020

# Section 22: Certification

Company Name: Public Service Company of New Mexico

I, Sky Northup, 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 <u>22</u> day of <u>October</u>, <u>2020</u>, upon my oath or affirmation, before a notary of the State of

New Maxico \*Signature

Date

Sky Northup Printed Name

Scribed and sworn before me on this day of \_\_\_\_\_

My authorization as a notary of the State of

Director, Plant Management I Title

October

2023

ARNALDA SOCE NOTARY PUBLIC - STATE OF NEW MEXICO My commission expires: 10/18/23

New Mexico

expires on the

2020

18th day of October

W Book

Notary

10/22/2020 Date

Notary's Printed Name

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

OFFICIAL SEAL

NIL ST.17