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DAVE MARTIN
CABINET SECRETARY

BUTCH TONGATE
DEPUTY SECRETARY

TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No: 7011 3500 0002 1596 9292
Return Receipt Requested

Operating Permit No:	P062R2M2
Facility Name:	San Juan Generating Station

Facility Owners: Unit 1: Public Service Company of New Mexico; Tucson Electric Power
Unit 2: Public Service Company of New Mexico; Tucson Electric Power
Unit 3: Public Service Company of New Mexico; Southern California Public Power Authority; Tri-State Generation and Transmission Association, Inc.
Unit 4: Public Service Company of New Mexico; Utah Associated Municipal Power Systems; City of Farmington, New Mexico; M-S-R Public Power Authority; City of Anaheim, California; Los Alamos County, New Mexico

Operator/Permittee Name:	Public Service Company of New Mexico (PNM)
Mailing Address:	Alvarado Square, Albuquerque, NM 87158
TEMPO/IDEA ID No:	1421–PRT20120001
AIRS No:	35-045-00902
Permitting Action:	Title V Modification
Source Classification:	Major-TV and Major-PSD
Facility Location:	36°48'2" N and -108°26'19" W
County:	San Juan
TV Permit Expiration Date:	1/24/2016
TV Renewal Application Due:	1/24/2015
Air Quality Bureau Contact:	Joseph Kimbrell
Main AQB Phone No.	(505) 476-4300

Richard L Goodyear — 26 Nov 2012

Richard L. Goodyear, PE — **Date**
Bureau Chief
Air Quality Bureau

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November 26, 2012

Richard L. Goodyear, PE
Bureau Chief
Air Quality Bureau

Date

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. Not Applicable

A101 Permit Duration (expiration)

A. This permit P062-R2M2 supersedes permit P062-R2**,** and will expire on January 24, 2016. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)

B. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

A102 Facility: Description

A. This facility consists of four coal-fired electric generating units and associated support facilities. Each coal-fired unit burns pulverized coal and No. 2 Diesel oil in a boiler and produces high-pressure steam which powers a steam turbine coupled with an electrical generator. Electrical power produced by the units is supplied to the electric power grid for sale. Coal for the units is supplied by the adjacent San Juan Mine and is delivered to the facility by conveyor. For the purposes of this permit, the four generating units at San Juan Generating Station are designated Unit 1, Unit 2, Unit 3, and Unit 4.

B. This facility is located at UTM Zone 12, UTMH 728.523 km, UTMV 4075.606 km, in Township 30N, Range 15W, Sections 16-21, 29, 30, approximately 3 miles north-northeast of Waterflow, New Mexico in San Juan County. This facility is a stationary source and not allowed to relocate. (20.2.70.302.A(7) NMAC)

C. This modification consists of 1) updating the permit due to petitions from environmental groups and EPA Order; 2) add permit limits that were authorized by NSR 0063M6R2

thru 63M7. This description is for informational purposes only and is not enforceable.

D. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding insignificant or trivial activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	24,710.1
Carbon Monoxide (CO)	39,427.0
Volatile Organic Compounds (VOC)*	249.0
Sulfur Dioxide (SO_2)	12,352.0
Total Particulate Matter (TSP)	3381.1
Particulate Matter less than 10 microns (PM_{10}) Filterable	1,550.0
Particulate Matter less than 2.5 microns ($PM_{2.5}$) Total	2836.2

Table 102.B: Total Potential HAPs that exceed 1.0 tons per year

Pollutant	Emissions (tons per year)
Hydrochloric acid (HCl)	15.8
Hydrofluoric Acid; (Hydrogen fluoride)	48.1
Total HAP	74.6

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations and Non-Applicable Regulations

A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit No: 0063-M7 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.14 NMAC Coal Burning Equipment – Particulate Emissions	X	E301, E302, E303, E304
20.2.31 NMAC Coal Burning Equipment – Sulfur Dioxide	X	E301, E302, E303, E304
20.2.32 NMAC Coal Burning Equipment – Nitrogen Dioxide	X	E301, E302, E303, E304

Applicable Requirements	Federally Enforceable	Unit No.
20.2.61 NMAC Smoke and Visible Emissions	X	E602, E603, E604, E605, E606
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	Entire Facility
20.2.77 NMAC New Source Performance	X	E301, E302, E303, E304, E803, E804, E805
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	E301, E303, E304, E803, E804, E805
40 CFR 60 Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators	X	E301, E303, E304
40 CFR 60 Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants	X	E803, E804, S805
40 CFR 64 Compliance Assurance Monitoring	X	E301, E302, E303, E304
40 CFR 68 Chemical Accident Prevention	X	Entire Facility
40 CFR 72 Subparts B, D, and I – Acid Rain Permit Regulations	X	E301, E302, E303, E304
40 CFR 73 Subparts B, C, and D – Sulfur Dioxide Allowance System	X	E301, E302, E303, E304
40 CFR 75 Subparts A-G - Continuous Emission Monitoring	X	E301, E302, E303, E304
40 CFR 76 Acid Rain Nitrogen Oxides Emission Reduction Program	X	E301, E302, E303, E304
40 CFR 77 Excess Emissions	X	E301, E302, E303, E304
40 CFR 82 Subpart B – Protection of Stratospheric Ozone, Servicing of Motor Vehicles	X	Entire Facility
March 10, 2005 Consent Decree filed in the United States District Court, District of New Mexico	X	E301, E302, E303, E304
Demister Settlement Agreement	X	E301, E302, E303, E304

B. Table 103.B lists requirements that are **not** applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

Table 103.B: Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
40 CFR 60 Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids		X	See note (2) below
40 CFR 60 Subpart Ka –Standards of Performance for Storage Vessels for Petroleum Liquids		X	See note (2) below

(1) Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.

(2) No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

C. Applicable requirements that give rise to emissions limits in this permit.

Table 103.C: Applicable Requirements Giving Rise to Permit Emission Limits
(for information only, not an enforceable condition)

Emission Unit Nos.	Applicable Requirement	Description of Requirement
E301, E303, E304	40 CFR 60.42(a)(1)	PM Emission Limit
E301, E303, E304	40 CFR 60.42(a)(2)	Opacity Emission Limit
E301, E303, E304	40 CFR 60.43(a)(2)	SO_2 Emission Limit
E301, E303, E304	40 CFR 60.44(a)(3)	NOx Emission Limit
E301, E303, E304	20.2.14.201.A NMAC	PM Emission Limit
E301, E303, E304	20.2.14.201.B NMAC	PM-2 Emission Limit
E301, E303, E304	20.2.31.109.B NMAC	SO_2 Emission Limit
E301, E303, E304	20.2.32.109 NMAC	NOx Emission Limit
E302	20.2.14.202.A NMAC	PM Emission Limit
E302	20.2.14.202.B NMAC	PM-2 Emission Limit
E302	20.2.31.110.A NMAC	SO_2 Control Efficiency Limit

Emission Unit Nos.	Applicable Requirement	Description of Requirement
E302	20.2.32.110.C NMAC	NOx Emission Limit
E301, E302, E303, E304	20.2.31.109.C NMAC	SO_2 Emission Limits (Plant-Wide)
E301, E302, E303, E304	NSR No. 63-M6, Condition 2	Emission Limits for Nox, SO_2, PM-10, TSP, CO, and VOC
E803	40 CFR 60.672(a)	PM and Opacity Emission Limits
E804, E805	40 CFR 60.672(b)	Opacity Emission Limit
E602, E603, E604, E605, E606	20.2.61.109 NMAC	Opacity Emission Limit
E101, E102, E103, E104, E201, E406, E407, E408, E409, E410, E411, E505, E506, E507, E508, E509, E510, E701, E702, E703, E704, E705, E706, E707, E801, E802	NSR No. 63-M6	Emission Limits for NOx, SO_2, PM-10, TSP, CO, or VOC
E301, E302, E303, E304	PNM self imposed	SO_2 Emission Limits

D. Units E301, E303, and E304 are subject to federal new source performance standards (NSPS) found in CFR Title 40, Part 60, Subpart A - General Provisions, and Subpart D and shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart D. (NSR Permit 63M6R1, Condition 1.d)

E. New Source Performance Standards (NSPS) found in 40 CFR 60, Subpart A - General Provisions, and Subpart OOO applies to certain pieces of equipment in the limestone handling system. Affected units shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart OOO. (NSR Permit 63M6R1, Condition 1.e)

F. Units E301, E302, E303, and E304 are subject to the applicable requirements of 20.2.14, 20.2.31, 20.2.32 NMAC. Table 103.F identifies whether the boiler unit is a new or existing unit including its vintage designation. (NSR Permit 63M6R1, Condition 1.f)

Table 103.F: Boiler Designation (NMAC) Information

Unit Number	Vintage		20.2.14, 20.2.31, and 20.2.32 NMAC
	20.2.31.7(H)	20.2.32.7(O)	
E301	1	--	New Coal Burning Equipment
E302	--	D	Existing Coal Burning Equipment
E303	2	--	New Coal Burning Equipment
E304	3	--	New Coal Burning Equipment

A104 Facility: Regulated Equipment

A. Table 104.A lists all of the process equipment authorized for this facility. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

Table 104.A: Regulated Equipment list

Unit No. [1]	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
S301/E301	Unit 1 Coal Boiler Begin Commercial Operation 12/1976	Foster Wheeler	--	08-1266	--	3707 MM Btu/hr [4]	Fabric Filter SO_2 Scrubber
S302/E302	Unit 2 Coal Boiler Begin Commercial Operation 11/1973	Foster Wheeler	--	08-1266	--	3688 MM Btu/hr [4]	Fabric Filter SO_2 Scrubber
S303/E303	Unit 3 Coal Boiler Begin Commercial Operation 12/1979	Babcock & Wilcox	--	RB-544	--	5758 MM Btu/hr [4]	Fabric Filter SO_2 Scrubber
S304/E304	Unit 4 Coal Boiler Begin Commercial Operation 4/1982	Babcock & Wilcox	--	RB-545	--	5649 MM Btu/hr [4]	Fabric Filter SO_2 Scrubber
S508/E501	Unit 1 Duct Leaks	--	--	--	--	–	Good air pollution control practices
S509/E502	Unit 2 Duct Leaks						
S510/E503	Unit 3 Duct Leaks	--	--	--	--	–	
S511/E504	Unit 4 Duct Leaks	--	--	--	--	–	
S111/E101	Coal Pile A Maintenance	--	--	--	--	--	TBD
S112/E102	Coal Pile A Maintenance	--	--	--	--	--	TBD
S113/E103	Coal Pile A Maintenance	--	--	--	--	--	TBD
S114/E104	Coal Pile A Maintenance	--	--	--	--	--	TBD
S201/E202	Coal Silo Transfer Point	--	--	--	--	--	Enclosure

Unit No. [1]	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
S203/E203	Coal Belt to Pulverizers transfer Point	--	--	--	--	--	Enclosure
S204/E201	Coal Pulverizers	Multiple	Multiple	Multiple	Multiple	8,200,000 tpy [3]	Building Enclosure
S425/E406	Unit 1 Cooling Tower	Marley	Note 2	D52	6615-5-11	170,000 gpm	Drift Eliminators/Design
S426E407	Unit 2 Cooling Tower	Marley	Note 2	D52	6615-5-11	165, 000 gpm	
S427/E408	Unit 3 Cooling Tower	Marley	Note 2	Model 2	644-12-333-75	220, 000 gpm	
S428/E409	Unit 4 Cooling Tower	Marley	Note 2	Model 2	6616-12-113-80	227,500 gpm	
S429/E410	Aux #1 Cooling Tower	Marley	1978	600 series	TBD	5,000 gpm	
S430/E411	Aux # 2 Cooling Tower	Marley	1978	TBD	TBD	30,000 gpm	
S518/E518	Unit 1 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S519/E519	Unit 2 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S512/E505	Unit 3 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S513/E506	Unit 4 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S514/E507	Unit 1 Fly Ash Silo Unloading	--	--	--	--	TBD	Moisture Control (Bulk Unloading)
S515/E508	Unit 2 Fly Ash Silo Unloading	--	--	--	--	TBD	
S516/E509	Unit 3 Fly Ash Silo Unloading	--	--	--	--	TBD	
S517/E510	Unit 4 Fly Ash Silo Unloading	--	--	--	--	TBD	
S738/E704	Front End Loader (Around Coal Piles)	--	--	--	--	--	Watering

Unit No. [1]	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
S753/E707	Front End Loader (Around Gypsum Piles)	--	--	--	--	--	Watering
E702, E703, E704-B, and E706	Un-Paved Haul Roads	--	--	--	--	--	Watering
E701, E705, and E708	Paved Road Emissions	--	--	--	--	--	Water Truck Street Sweeper
S804/E802	Lime Stone Pile Maintenance	--	--	--	--	--	TBD
E801	Limestone Truck Unloading	—	—	—	—	—	None
S806/E803	Limestone Silo loading	—	—	—	—	—	Baghouse
E804	Limestone Hopper to Transfer Conveyor	—	—	—	—	—	None
E805	Limestone Silo to Weigh	—	—	—	—	—	None
S901	Activated Carbon Silo	--	TBD	--	--	45,000 lb	Dedicated Baghouse (E901)
S902	Activated Carbon Silo	--	TBD	--	--	45,000 lb	Dedicated Baghouse (E902)
S903	Activated Carbon Silo	--	TBD	--	--	72,000 lb	Dedicated Baghouse (E903)
S904	Activated Carbon Silo	--	TBD	--	--	72,000 lb	Dedicated Baghouse (E904)

1 Unit number designations starting with an “S” indicate Source and “E” Designations indicate emissions points

2 The manufacture date for the boilers (Units E301 – E304), the boiler specific cooling towers (Units 406 – 409), and the coal pulverizer (Unit E201) is assumed to be the “begin commercial operations” date for the respective boilers.

3 The coal pulverizers have a capacity of 1,600,000 tons per year of coal for each emissions units E301 and E302. The coal pulverizers have a capacity of 2,500,000 tons per year of coal for each emissions units E303 and E304. These capacity values are rounded to the nearest 100,000 tons per year. These values are based on historical coal use, scaled up to 100 percent unit utilization (i.e 100 percent load at 8760 hours per year).”

4 The Btu/hr value listed in Table 104 Includes a 6% safety factor added to nominal rated capacity of the boilers existing at the time of permit issuance.

A105 Facility: Control Equipment

A. Table 104.A lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

A106 Facility: Allowable Emissions

A. The following table(s) list the emission units, and their allowable emission limits. (40 CFR 50, 40 CFR 60, Subparts A and D, and OOO; 40CFR72 Subparts B, D, and I; 40CFR73 Subparts B, C, and D; 40CFR75 Subparts A-G; 40CFR76; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit 0063M7).

Table 106.A: Maximum Allowable Emission Rates for Units E301 (1), E302 (2), E303 (3), and E304 (4)

Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E302 E303 E304	CO	E301 – 3000 lb/hr E302 – 2000 lb/hr E303 – 2000 lb/hr E304 – 2000 lb/hr	Per Compliance Method	20.2.3 NMAC, 40 CFR 50, NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	NOx	E301 – 1,573.7 lb/hr E302 – 2,435.3 lb/hr E303 – 2,444.4 lb/hr E304 – 2,398.1 lb/hr	24-Hour Average	NSR No. 63-M2 20.2.32 NMAC,	CEMS
E301 E302 E303 E304	NOx	E301 – 4871 tons/yr E302 – 4844 tons/yr E303 – 7564 tons/yr E304 – 7424 tons/yr	Daily rolling 365-day Total	NSR No. 63-M2 20.2.32 NMAC,	CEMS
E301 E303 E304	NOx	0.70 lb/MMBtu	3-Hour Average, Rolled Hourly	40 CFR 60.44(a)(3)	CEMS
E302	NOx	0.70 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.32.110.C NMAC	CEMS
E301 E303 E304	NOx	0.45 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.32.109 NMAC	CEMS
E301 E302 E303 E304	NOx [1, 5]	0.30 lb/MMBtu	30 day rolling average[5]	0063-M4	CEMS & Process Records
E301 E302 E303 E304	Opacity[8]	20%	6-Minute Average	40 CFR 60.42(a)(2); for E302-NSR 63M4 and Consent Decree	COMS
E301 E302 E303 E304	TSP[4] (Filterable)	E301 – 174.8 lb/hr E302 – 173.9 lb/hr E303 – 271.6 lb/hr E304 – 266.5 lb/hr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	TSP[4] (Filterable)	E301 – 765.8 tons/yr E302 – 761.9 tons/yr E303 – 1,189.6 tons/yr E304 – 1,167.1 tons/yr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	PM [4,7] (Filterable)	0.015 lb/MMBtu	Per Compliance Method	0063-M4 and Consent Decree	Quarterly Testing

Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E303 E304	PM[4] (Filterable)	0.1 lb/MMBtu	Per Compliance Method	40 CFR 60.42(a)(1)	Quarterly Testing
E301 E303 E304	PM[4] (Filterable)	0.05 lb/MMBtu	Per Compliance Method	20.2.14.201.A NMAC	Quarterly Testing
E302	PM[4] (Filterable)	0.05 lb/MMBtu	Per Compliance Method	20.2.14.202.A NMAC	Quarterly Testing
E301 E302 E303 E304	PM-10[4] (Filterable)	E301 – 174.8 lb/hr E302 – 173.9 lb/hr E303 – 271.6 lb/hr E304 – 266.5 lb/hr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	PM-10[4] (Filterable)	E301 – 765.8 tons/yr E302 – 761.9 tons/yr E303 – 1,189.6 tons/yr E304 – 1,167.1 tons/yr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	PM-2.5[4] (Filterable)	E301 – 55.6 lb/hr E302 – 55.3 lb/hr E303 – 86.4 lb/hr E304 – 84.7 lb/hr	Per Compliance Method	0063-M6	Quarterly Testing
E301 E302 E303 E304	PM-2.5[4] (Filterable)	E301 – 243.5 tons/yr E302 – 242.2tons/yr E303 – 378.4 tons/yr E304 – 371.0 tons/yr	Per Compliance Method	0063-M6	Quarterly Testing
E301 E302 E303 E304	PM-2.5[4] (Total)	0.034 lb/MMBtu	Per Compliance Method	NSR No. 63-M7	Annual Testing
E301 E302 E303 E304	PM-2.5[4] (Total)	E301 – 126.0 lb/hr E302 – 125.4 lb/hr E303 – 195.8 lb/hr E304 – 192.1 lb/hr	Per Compliance Method	NSR No. 63-M7	Annual Testing
E301 E302 E303 E304	PM-2.5[4] (Total)	E301 – 552.0 tons/yr E302 – 549.0 tons/yr E303 – 858.0 tons/yr E304 – 841.0 tons/yr	Per Compliance Method	NSR No. 63-M7	Annual Testing
E301 E303 E304	PM-2[4] (Filterable)	0.02 lb/MMBtu	Per Compliance Method	20.2.14.201.B NMAC	Note 2
E302	PM-2[4] (Filterable)	0.04 lb/MMBtu	Per Compliance Method	20.2.14.202.B NMAC	Note 2
E301 E302 E303 E304	SO_2	90% removal	Annual Average	0063-M4	CEMS
E301 E302 E303 E304	SO_2 [6]	0.250 lb/MMBtu	7-day block average	0063-M4	CEMS & Process Records

Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E302 E303 E304	SO_2	E301 – 2435.0 tpy E302 – 2423.0 tpy E303 – 3783.0 tpy E304 – 3711.0 tpy	Per Compliance Method	20.2.3 NMAC, 40 CFR 50	CEMS
E301 E302 E303 E304	SO_2	0.15 lb/MMBtu[9]	30-Day Average, Rolled Daily	PNM self imposed limit, NSR 63M6R2	CEMS & Process Records
E301 E303 E304	SO_2	1.2 lb/MMBtu	3-Hour Average, Rolled Hourly	40 CFR 60.43(a)(2)	CEMS
E301 E303 E304	SO_2	1.2 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.31.109.B NMAC	CEMS
E302	SO_2	Minimum 72% Control	30-Day Average, Rolled Daily	20.2.31.110.A NMAC	CEMS
E301 E302 E303 E304	VOC	E301 – 11.1 lb/hr E302 – 11.1 lb/hr E303 – 17.3 lb/hr E304 – 17.0 lb/hr	Per Compliance Method	NSR No. 63-M2	Note 3

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2

2 PNM shall show compliance with either the PM or PM_2 limits as required in 20.2.14 NMAC.

3 Test results that demonstrate compliance with CO emission limits shall also be considered to demonstrate compliance with VOC emission limits for the subject emission unit.

4 The TSP emission limits in this permit only include filterable particulate emissions since the test method only measures filterable TSP. PM10 and PM2.5 filterable limits will remain. PM2.5 Total limits include both filterable and condensibles.

5 For purposes of calculating the thirty (30) day rolling average, NO_x emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.30 lb/MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler.

6 The seven (7) day average emission rate of SO_2 at San Juan Units E301, E302, E303, and E304 shall not exceed 0.250 lb-SO_2/MMBtu for each unit, calculated as a block average as measured by SO_2 CEMS located downstream of the scrubber outlet and any scrubber by-pass return. For purposes of calculating the block average, SO_2 emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.250 lb./MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler.

7 The PM average emission rate for each of Units E301, E302, E303, and E304 shall not exceed 0.015 lb-PM/MMBtu, as measured by EPA Reference Method 5 or 5i stack tests, conducted at least once each calendar quarter at times and conditions specified by the Department, and according to test protocols approved by the Department, but in all cases under conditions and in a manner no less stringent than described in EPA's 2009 Clean Air Act National Stack Testing Guidance.

8 The opacity limit for San Juan Units E301, E303, and E304 as required by 40 CFR 60.D and E301, E302, E303, and E304 as required by this permit shall be twenty (20) percent, averaged over any six (6) minute period except for one six (6) minute average per hour of up to twenty-seven (27) percent opacity. This limit shall apply at all times when air pollutants are being discharged into the atmosphere, unless PNM demonstrates that any excess opacity reading: (a) was caused by a startup, shutdown, malfunction, or emergency, or (b) occurred when both the boiler and all fans that move flue gas in the unit were off. Load changes, poor coal quality, air heater cleaning, sootblowing, and high ash hoppers shall not be used as a defense for any excess opacity reading. Opacity shall be measured in the duct or, if approved by EPA, after the outlet of the baghouse and corrected to stack exit. (CD 9a)

9 Compliance with the 0.15 lb/MMBtu heat input 30-day rolling average SO_2 emission limitation is determined by calculating at the end of each rolling 30 successive boiler operating days the arithmetic average of all hourly emission rates for SO_2, except for data obtained during emergency conditions. Hourly emission rates will only

be determined based on valid SO_2 CEMs data for any hour where fuel is combusted in the unit. No missing hour substitute data will be used in determining compliance with the proposed 0.15 lb/MMBtu heat input 30-day rolling average SO_2 emission limit. *"Boiler operating day"* means a 24-hour period between 12 midnight and the following midnight (MST) during which any fuel is combusted at any time in the steam-generating unit. (NSR 63M6R2)

B. Table 106.B contains the maximum allowable emission rates for Units E301, E302, E303, and E304 combined. (NSR 63M6R1, Condition 2.b)

Table 106.B, Maximum Allowable Emission Rates for Units E301-E304 Combined

Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
NOx [1]	9,000 lb/hr	24-Hour Average, Rolled Hourly	NSR No. 63-M2, 40 CFR Part 50	CEMS
SO_2	13,000 lb/hr	3-Hour Average, Rolled Hourly	20.2.31.109.C NMAC	CEMS
SO_2	0.55 lb/MMBtu	30-Day Average, Rolled Daily	20.2.31.109.C NMAC	CEMS & Process Records
SO_2	0.46 lb/MMBtu	Annual Average	NSR No. 63-M2	CEMS & Process Records

[1] Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2

C. Table 106.C list the allowable emissions from duct leaks. Compliance shall be determined by implementation of a duct leak management program. (NSR 63M6R1, Condition 2.d)

Table 106.C, Maximum Allowable Emission Rates for Duct Leaks

Emission Unit No.	Maximum Allowable Emission Rates											
	TSP		PM-10		PM-2.5		NOx		CO		SO_2	
	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
E501	11.3	45.0	4.5	18.1	2.1	9.2	0.3	0.8	0.5	2.0	1.1	4.5
E502	12.4	50.0	4.9	20.0	2.1	9.2	0.4	0.8	0.4	1.5	1.2	4.9
E503	12.6	50.4	5.0	20.1	2.0	8.9	--	0.8	0.2	1.0	1.3	5.0
E504	14.5	58.3	5.8	23.3	2.0	8.9	0.3	1.0	0.3	1.1	1.5	5.8

D. Table 106.D lists the allowable emission limits for non-boiler emission units. The emissions from any individual piece of equipment shall not exceed the limits listed in the table. (NSR 63M6R1, Condition 2.e)

Table 106.D, Maximum Allowable Emission Rates for Non-Boiler Emission Units

Emission Unit No.	Maximum Allowable Emission Rates in Pounds per Hour (pph) and Tons per Year (tpy)			
	TSP		PM-10	
	pph	tpy	pph	tpy
E101	1.6	7.0	--	1.6
E102	1.6	7.0	--	1.6
E103	1.6	7.0	--	1.6
E104	1.6	7.0	--	1.6
E201	7.3	32.0	2.8	12.3
E202	--	0.6	--	--
E203	--	0.6	--	--
E406	9.4	41.0	9.4	41.0
E407	9.1	39.8	9.1	39.8
E408	9.1	39.8	9.1	39.8
E409	12.5	54.9	12.5	54.9
E410	--	1.0	--	1.0
E411	1.3	5.8	1.3	5.8
E505	--	0.5	--	--
E506	--	0.5	--	--
E507	0.6	2.4	--	1.1
E508	0.6	2.4	--	1.1
E509	0.9	3.7	--	1.8
E510	0.8	3.7	--	1.7
E518	--	--	--	--
E519	--	--	--	--
E704A	0.9	3.9	--	1.2
E707	2.3	10.3	0.8	3.3
Paved Roads (E701, E705, E708)	12.2	53.5	2.4	10.4
Unpaved Roads (E702, E703, E704B, ,E706)	9.0	39.5	2.7	6.8
E801	0.7	3.1	--	1.5
E802	2.4	10.4	--	1.6
E803	--	--	--	--
S901	--	--	--	--
S902	--	--	--	--
S903	--	--	--	--
S904	--	--	--	--

Note: E704A is the front end loader emissions from travel around the coal piles. E704Bis front end loader emissions on unpaved roads.

"--" indicates that the emissions are less than 1.0 pph or 1.0 tpy and emission limits are not required for this permit.

E. Unless otherwise required by this permit or another applicable regulation, compliance with the NOx emission limits shall be determined on a unit-specific basis

using data from NOx CEMS that have been installed, calibrated, and operated in accordance with 40 CFR. 75 and any other applicable requirement. (NSR 63M6R1, Condition 2.f)

F. Unless otherwise required by this permit or another applicable regulation, compliance with the SO_2 emission limits shall be determined on a unit-specific basis using data from SO_2 CEMS that have been installed, calibrated, and operated in accordance with 40 CFR 75 and any other applicable requirement. (NSR 63M6R1, Condition 2.g)

G. Each affected facility as defined in 40 CFR 60 Subpart OOO of the limestone handling system, including the limestone silo, shall meet the standards for particulate matter specified in 40 CFR 60.672. (NSR 63M6R1, Condition 2.h)

H. In accordance with 20.2.61.109 NMAC, the owner or operator of stationary combustion equipment shall not permit, cause, suffer or allow visible emissions from the stationary combustion equipment to equal or exceed an opacity of 20 percent; provided, however, stationary combustion equipment which is regulated by Parts 20.2.10 NMAC through 20.2.18 NMAC, 20.2.37 NMAC, and 20.2.42 NMAC, and any other Part of Chapter 2 which specifically limits particulate emissions is exempted from this Part. The emergency generators are subject to 20.2.61.109 NMAC. (NSR 63M6R1, Condition 2.i)

I. The activated carbon silo baghouses shall be designed and operated so there are no visible emissions. (NSR 63M6R1, Condition 2.k)

(1) For mercury control, the operating procedures needed to maximize mercury removal per the consent decree requirements are not yet available to explicitly incorporate in this permit renewal. Once PNM, NMED and the Plaintiffs agree on the maximal mercury removal rate and procedure, then this permit will be re-opened or modified to incorporate limits and/or conditions to meet consent decree requirements. (CD 9d)

J. Emission limits totals are used solely for assessing annual fees in accordance with 20.2.71 NMAC. SJGS has many limits for each pollutant. This table shows the most stringent of these limits for each pollutant for which the annual fees will be based. Only pollutants for which we can assess fees are shown. (B103A)

Table 106.J: Emissions (tons per year) total for annual fees use

Unit	[1]NOx	[2]CO	[3]VOC	[4]SO_2	[5]PM
E301	4, 871	13,140	48.7	2,435	552
E302	4,844	8,760	48.5	2,423	549
E303	7,564	8,760	75.8	3,783	858

Unit	[1]NOx	[2]CO	[3]VOC	[4]SO_2	[5]PM
E304	7,424	8,760	74.5	3,711	841
Misc					[6]581.1
Totals*	24,703	39,420		12,352	
Used for fees	6,000	6,000	247.5	6000	3381.1

* Amounts are capped at 6,000 tpy per pollutant by regulation (20.2.71.111.C(4) NMAC).

[1] Units 1,2,3,4: Tons per year NOx limits obtained by scaling up 0.3 lbs/MMBtu 30-day average (CD 9cii; Table 106.A).

[2] Units 1,2,3,4: Tons per year CO limits obtained by scaling up lbs/hr limits (Table 106.A).

3 Units 1,2,3,4: VOC totals based on average coal Btu content and revised heat input values (Application dated January 2009).

[4] Units 1,2,3,4: Tons per year SO2 limits by scaling up 0.15 lb/MMBtu SO2 PNM self imposed limit.

[5] Units 1,2,3,4: Tons per year PM limits obtained by scaling up 0.015 lbs/MMBtu (CD 9cii; Table 106.A) plus the PM-2.5 condensibles of 0.019 lbs/MMBtu (NSR 63M7).

[6] Represents sum of PM totals from Tables 106.C and 106.D.

A107 Facility Allowable Startup, Shutdown, and Maintenance (SSM) Emissions

A. SJGS Units have multiple NOx limits for different averaging times. Some limits are expressed in lbs/mmBtu rather than lbs/hr. Units 1, 3 and 4 have a 3-hr average limit of 0.45 lbs/mmBtu. During SSM this limit may be exceeded for each of these units. The maximum NOx emission rate during SSM for these units is 0.7 lbs/mmBtu. The Unit 2 3-hr NOx limit is 0.7 lbs/mmBtu and Unit 2 NOx emissions are not expected to exceed this rate during SSM. The permittee shall maintain records in accordance with Condition B109.E. SJGS shall comply with all other emission limits established for steady state operations even during SSM events.

A108 Facility: Hours of Operation

A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting requirements are required to demonstrate compliance with continuous hours of operation.

A109 Facility: Reporting Schedules

A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1st and July 1st of each year.

B. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on January 1st of each year.

C. The quarterly reports required by NSR Permit 0063M6R1 and quarterly reportable items required by this permit shall be submitted quarterly.

A110 Facility: Fuel Sulfur Requirements (not required)

A111 Facility: 20.2.61 NMAC Opacity (see specific conditions)

A112 Compliance Plan
(20.2.70.302.G.2 NMAC)

NMED has the authority, pursuant 20.2.74.300 NMAC, to review the post project data to determine if the pre-project information and projection were in fact correct. NMED has evaluated the post project emission data for NSR Permit 0063M4 per 20.2.74.7.AR(1) NMAC and determined that there is a significant emissions increase of CO for Unit 2 of 297 tpy based on the Baseline Actual Emission (BAE)-to-Projected-Actual Emissions (PAE) applicability test. The threshold for CO is 100 tpy per Table 2 of 20.2.74.502 NMAC. Units 1, 3, and 4 had CO emission decreases well over 1,000 tpy per unit. PNM had in good faith submitted a proper NSR application for action 0063M4 in accordance with 20.2.74.7.AR(1) NMAC. PNM is required to comply with PSD applicability requirements due to the post project emission increases.

A. The permittee shall submit the following information concerning the compliance status of this facility: (20.2.70.302.G.3 NMAC)

B. Compliance Activities: The permittee shall perform the following activities in order to bring the permitted facility into compliance with the requirements of 20.2.74 NMAC.

(1) Submittal of a modification to the NSR permit to take federally enforceable CO emission limits as necessary to establish the PAE for purposes of the netting analysis. Update Section 12 of the application stating that the project is significant, and provide a complete netting analysis for CO.

(2) If PNM chooses not to modify the NSR permit to obtain the credible decreases that allow the project to net-out of PSD, then PNM must submit a PSD application and BACT determination for CO in accordance with 20.2.74 NMAC.

C. The permittee shall complete the activities above within 180 days from issuance of the reopened Title V Permit P062R2M2:

D. Compliance schedule progress reports are not required for this action.

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry - Not Required

CONSTRUCTION INDUSTRY

A300 Construction Industry – Not Required

POWER GENERATION INDUSTRY

A400 Power Generation Industry

This section has common equipment related to most Electric Service Operations (SIC-4911).

A. This facility and Units E301, E302, E303, and E304 (boilers) are subject to and shall have complied with the requirements of 40 CFR Part 72 by applying for and obtaining an Acid Rain Permit, P062AR2 and is a part of this operating permit. The requirements of Section B116 shall apply.

B. Acid Rain Program Monitoring

Requirement: : Emission Units E301, E302, E303, and E304 (boilers) are subject to and shall comply with the requirements of 40 CFR Part 75 for installation, calibration, maintenance and operation of NOx and SO_2 continuous emissions monitoring systems (NOx and SO_2 CEMS) and for continuous opacity monitoring systems (COMS). (NSR Permit 63M6R1, Condition 1.t, and revised)
Monitoring: The permittee shall comply with the requirements at 40 CFR 75.12(a) and 75.12(b) for continuous monitoring of NOx emissions; with the requirements at 40 CFR 75.11(a) and 75.11(b)(2) for continuous monitoring of SO_2 emissions; with the requirements at 40 CFR 75.14(a) for continuous monitoring of opacity; and with the requirements at 40 CFR 75.13(b) and 75.13(c) for continuous monitoring of CO_2 emissions.
Recordkeeping: The permittee shall comply with the applicable recordkeeping requirements of 40 CFR Part 75, Continuous Emission Monitoring, subpart F, Sections 75.50 through 75.59; and in accordance with Section B109 of this permit.
Reporting: In accordance with 40 CFR 75.

C. Mercury CEMS

Requirement: The permittee shall install, maintain, and operate mercury CEMS in accordance with the manufacturer's recommendations. (NSR 63M6R1, Condition 1.y)
Monitoring: The permittee shall continually monitor the mercury emissions using CEMS that are installed and maintained in accordance with the CEMS manufacturer's recommendations. (NSR 63M6R1, Condition 3.m)

Recordkeeping: In accordance with Section B109, the permittee shall keep records of the mercury CEMS outputs, calculations, and any CEMS maintenance activity necessary to show accurate and continual mercury emission rates were recorded. (NSR 63M6R1, Condition 4.s).
Reporting: An annual evaluation of the mercury CEMS shall be performed and submitted to the NMED within 30 days after January 1 of each year.

D. PNM shall maintain, calibrate, and operate CEMS at San Juan Units E301, E303, and E304 to measure accurately and continuously opacity and the emissions of SO_2, NOx, and the exhaust flow rate from each unit in full compliance with the requirements of 40 CFR Parts 60 and 75, including requirements for heat input rate measurements. Although Unit 302 is not an affected unit for purposes of NSPS 40 CFR 60, Subpart D, PNM shall maintain, calibrate, and operate CEMS at San Juan Unit E302 to measure continuously opacity and the emissions of SO_2, NOx, and the exhaust flow rate from the unit in accordance with the requirements of 40 CFR Parts 60 and 75, including requirements for heat input rate measurements. (NSR 63M6R1, Condition 5.g)

A401 Turbines - Not Required

A402 Boilers

A. Units E301, E302, E303, and E304

Requirement: Each boiler shall be equipped and operated with a baghouse, to meet the emission limits, except as otherwise allowed under the applicable provisions of 20.2.7 NMAC and 40 CFR 60 Subpart A (E301, E303, and E304 only). In addition, Control Devices associated with Emission Units E301, E303, and E304 are subject to the requirements of 40 CFR 60.11(d). Each baghouse associated with the boilers shall be maintained and operated in accordance with good air pollution control practices for minimizing emissions. Individual boilers shall only be operated when its associated baghouse is achieving a control efficiency sufficient to ensure compliance with all applicable particulate emission limits listed in this permit. (NSR 63M6R1, Condition 1.p)
Monitoring: For baghouses associated with Units E301, E302, E303, and E304, PNM shall record the pressure drop across each baghouse with a continuous monitoring device. The continuous monitoring device shall be designed with an alarm that records and signals to the operator any excursion outside the normal operating range of the baghouse. The normal operating range of the baghouse shall be determined by the manufacture or another Department approved method. (NSR 63M6R1, Condition 3.e and 4.e)
Recordkeeping: In accordance with Section B109, the pressure drop for each baghouse will be recorded hourly and these records will be kept on site for review.
Reporting: No reporting required in accordance with Section B110.A of this permit.

B. CAM Monitoring, Units E301, E302, E303, and E304

Requirement: CAM Rule Corrective Action Requirements: (1) The units are pollutant specific emission units for SO_2, NOx and PM and are subject to and shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the requirements of 40 CFR 64.7(d) for corrective actions. Each unit has CEMS for

SO_2 and NOx which are required under acid rain regulations and, therefore, exempt SO_2 and NOx from CAM requirements. (2) As a requirement of this permit the permittee is subject to and shall comply with the corrective provisions of the PM CAM Plan dated July 2010 submitted in the application for this permit and attached to this permit, except that the trigger points for corrective actions and excursions shall be those specified in Table 402.B. (3) In accordance with 40 CFR 64.6(b), the permittee shall submit COM data 12-months after the issuance of this permit to show the that the indicator range of 6% for Opacity has been set sufficiently to satisfy the requirements of 40 CFR 64 and to confirm the appropriateness of the indicator. (40 CFR 64 and 20.2.70.302.A(7) NMAC)
Monitoring: (1) The permittee shall continuously monitor opacity of the units in accordance with the specifications of 40 CFR Part 60, Appendix B for continuous opacity monitors (COMs). (40 CFR 64.6(c)(1)(ii) and 20.2.70.302.A(7)). (2) The COMs shall collect at least one duct opacity reading every 10 seconds, except as allowed by (4) below (40 CFR 64.6(c)(1)(iii), 40 CFR 64.3(b)(4), 40 CFR 64.3(d)(3), and 20.2.70.302.A(7)). (3) The COMs shall be maintained at all times, including but not limited to maintaining the spare parts necessary for routine repairs (40 CFR 64.6(c)(3) and 40 CFR 64.7(b)). (4) Except for applicable monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct the opacity monitoring at all times that each unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used to meet the requirements of this permit that implement the requirements of 40 CFR Part 64. All data collected during all other periods shall be used in assessing the operation of the control devices for those emission units (40 CFR 64.6(c)(3), 40 CFR 64.7(c)). (5) For the purposes of terms and conditions of this permit that implement the requirements of 40 CFR Part 64, a monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR 64.6(c) and 40 CFR 64.7(c)). CAM Indicators: (6) Visible emissions (opacity) as measured by COM 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). (7) Differential pressure drop across the fabric filter on each unit. (8) By-pass damper position (open/closed) indicator.
Recordkeeping: The Permittee shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the recordkeeping requirements of 40 CFR 64.9(b). (40 CFR 64 and 20.2.70.302.A(7) NMAC)
Reporting: The Permittee shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the reporting requirements of 40 CFR 64.9(a). (40 CFR 64 and 20.2.70.302.A(7))

Table 402.B, CAM Indicator Trigger Points for Corrective Actions and Excursions

Indicator	Trigger Point[1]
1	An excursion is defined as a condition when the average opacity exceeds six (6) percent for any consecutive 3-hr period.
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.
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.

[1]The permittee shall use the permit modification procedures of 20.2.70.404.B NMAC to change the CAM Plan.

C. Duct Leak Management Program on Units E501, E502, E503, and E504

Requirement: The Duct leak management program shall be conducted in accordance with good air pollution control practices for minimizing emission. All remaining combustion gasses shall be exhausted through the primary stack of each unit. Compliance with this requirement shall be determined using data generated by the monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 1.s, revised)

The Expansion Joint Maintenance Program (EJMP) shall include:

a. A written procedure that identifies expansion joint inspection procedures, inspection points, inspection locations, inspection frequency and recordkeeping procedures.
b. Identification of measures and time taken to mitigate (minimize) and repair leaks including immediate and long-term corrective actions.
c. Quarterly assessment and evaluation of the EJMP covering the ability of the EJMP to detect and identify leaks, potential preventive maintenance measures identified to prevent or minimize leaks, and assessment of effectiveness of measures taken to minimize leaks.

Monitoring: Monitor performance of the EJMP to ensure that the program meets the requirements of this permit. At a minimum, this quarterly monitoring shall include an assessment of the program's performance in meeting the requirements above, including an estimate of the actual area of duct leaks present on the subject emission units.

Recordkeeping: Records of the EJMP practices, quarterly inspections, and quarterly assessment of the program's performance shall be maintained on site. (NSR 63M6R1, Condition 4.n, revised)

Reporting: The quarterly assessment of the program's performance shall be reported quarterly. The initial EJMP practices document shall be submitted for Department review within 60 days after the issuance of this permit and within 60 days of each subsequent revision.

D. Limestone Forced Oxidation (LSFO) Scrubber Operations

Requirement: The boilers (E301, E302, E303, and E304) shall be equipped and operated with limestone scrubbers. PNM shall not exceed the emission limits. To the extent necessary to meet the SO_2 emission limits and the SO_2 control efficiency requirements of this permit (Table 106.C), PNM shall add dibasic acid to the limestone slurry feed of each scrubber. The limestone scrubbers (E301, E302, E303, and E304) shall be maintained and operated in accordance with good air pollution control practices for minimizing emissions, except as otherwise allowed under the applicable provisions of 20.2.7 NMAC and 40 CFR 60 Subpart A (E301, E302, and E304 only). Compliance with these requirements shall be determined using

data generated and by Department inspections of the units. (NSR 63M6R1, Condition 1.r)
Monitoring: Control Devices C09, C11, C13, and C15, associated with Emissions Units E301, E302, E303, and E304, respectively, are subject to monitoring for good air pollution control practices and proper operation and maintenance. This monitoring shall consist of keeping monthly records of the performance of maintenance and repair activities on these control devices.
Recordkeeping: In accordance with Section B109, records of performance on maintenance and repair activities shall be kept on site for review.
Reporting: No reporting required in accordance with Section B110.A of this permit.

E. Heat Input

Requirement: Heat input to these boilers shall not increase as a result of installation of the low-NOx burners. Compliance with this condition shall be provided upon request of the Department. An increase in heat input solely due to an increase in demand is authorized. (NSR 63M6R1, Condition 1.u)
Monitoring: (1) For each boiler, the 24-hour heat input value shall be calculated by multiplying the 24-hour coal flow rate with the 7-day rolling average Btu content of the coal. The 7-day rolling average Btu content of the coal shall be derived from as delivered coal sample analysis. In the event no coal is delivered for 7 or more days, the last 7-day rolling average will be used. (NSR 63M6R1, Condition 4.o) (2) PNM shall keep records of the "as-delivered" heat content of the coal. The heat content of the coal shall be analyzed using an appropriate ASTM method, in accordance with the requirements of the coal contract. (NSR 63M6R1, Condition 4.p) (3) For each boiler, the 365-day rolling total heat input shall be calculated as a summation of the 24-hour heat input value calculated. (NSR 63M6R1, Condition 4.q)
Recordkeeping: In accordance with Section B109, records of the "as delivered" heat content of the coal and the 365 day rolling total heat input calculations shall be maintained.
Reporting: No reporting required in accordance with Section B110.A of this permit. Upon written request by the Department, PNM shall summarize and report the 365-day rolling total heat input values calculated in (1) above. (NSR 63M6R1, Condition 5.c)

F. Continuous Opacity Monitors

Requirement: (1) Units E301, E303, and E304 are subject to 40 CFR 60 Subpart D and PNM shall operate the COMs for units E301, E303, and E304 as required in 40 CFR 60 Subpart D. (2) Although Unit 302 is not an affected unit for purposes of NSPS 40 CFR 60, Subpart D, PNM shall install, calibrate, maintain, and operate COMs on Unit E302 per the procedures specified in 40 CFR 60 Subpart D. The COMs for Unit E302 shall be installed in a location comparable to the COM location of Units E301, E303, and E304, unless otherwise approved by the Department. (NSR Permit 63M6R1, Condition 3.c) (3) For units E301, E302, E303, and E304 the permittee shall determine compliance with the opacity limits of the permit on a continuous basis, using data from the current COMS or an EPA approved COMs and an alternative location. All COMs shall be certified or

recertified per the procedures in 40 CFR Part 60. (NSR Permit 63M6R1, Condition 3.b)
(4) In accordance with the Alternative Monitoring Procedure approved by EPA, the COMS shall be installed between the Bahouse and SO2 Scrubbers.
Monitoring: For units E301, E302, E303, and E304 the permittee shall determine compliance with the opacity limits of the permit on a continuous basis, using data from the current COMS or an EPA approved COMs and an alternative location.
Recordkeeping: Records of opacity readings and QA/QC events will be maintained and records of compliance with applicable recordkeeping requirements of 40 CFR 60, Subparts A and D.
Reporting: In accordance with applicable reporting requirements of 40 CFR Part 60, Subparts A and D.

G. 20.2.31 NMAC (Units E301, E302, E303, and E304)

Requirement: The units are subject to and shall comply with the requirements of 20.2.31.112 NMAC for SO_2 continuous emissions monitoring (CEMS).
Monitoring: SO_2 continuous emissions monitoring (CEMS).
Recordkeeping: In accordance with Section B109 of this permit and compliance with applicable recordkeeping requirements of 20.2.31.113 NMAC.
Reporting: No reporting is required in accordance with Section B110.A of this permit.

H. Periodic Stack Test For Units E301, E302, E303, E304, and E803

Requirement: Units E301, E302, E303, and E304 (boilers) are subject to periodic compliance testing for PM, TSP, PM_{10}, $PM_{2.5}$, and CO using stack tests and Emission Unit E803 is subject to periodic compliance testing for PM using stack tests. The tests for PM, TSP, PM_{10}, and $PM_{2.5}$ on Emission Units E301, E302, E303, and E304 (boilers) shall be performed quarterly. The tests for CO on Emission Units E301, E302, E303, and E304 (boilers) shall be performed quarterly. The tests on Emission Unit E803 shall be performed at the discretion of the Department. (NSR 63M6R1, Condition 6.b-6.f)
Monitoring: The permittee shall perform quarterly tests and keep records of the periodic emissions tests in accordance with Table 402.H and Section B111 of this permit.
Recordkeeping: In accordance with Sections B109 and B111 of this permit.
Reporting: In accordance with Sections B110 and B111 of this permit.

Table 402.H: Quarterly testing Requirements

Pollutant	Reference Method
CO [1]	Methods 1-4 and 10
PM (TSP, PM_{10}, $PM_{2.5}$)[2,3,4]	Method 1-5, 5i

[1] Test results that demonstrate compliance with CO emission limits shall also be considered to demonstrate compliance with VOC emission limits for the subject emission unit.

[2] PNM may use Method 5 or 5i testing to demonstrate compliance with the PM_{10} and $PM_{2.5}$ standards.

[3] PM_{10} and $PM_{2.5}$ particulate emissions include condensable particulate matter.

[4] PNM shall conduct compliance testing to determine the condensable portion of actual PM_{10} and $PM_{2.5}$ emissions using EPA Method 201A, annually. PNM will also conduct a Method 5i test at approximately the same time it conducts each Method 201A test.

I. Demister Operations

Requirement: Not Later than November 2011, PNM shall install pressure monitoring systems across the demister elements associated with all of the scrubber modules. Recordkeeping requirements will become effective on January 1, 2012. The monitoring systems shall have the accuracy, reliability and quality to determine whether the demisters are operating in as represented in the Demister Report that is associated with the 14 fps maximum velocity of the demister and based on actual pressure drop readings. (Demister Settlement Agreement, Paragraph 21.j)

(1) Each demister will be cleaned with "clean wash water sprays" on a wash sequence which is in automatic mode and in continuous operation. The wash sequence will automatically switch from cell to cell.

(2) During plant outages, manual cleaning to remove stubborn deposits as noted during inspections

Monitoring:

(1) PNM shall monitor hourly the pressure drop across each demister from a continuous monitoring device. The continuous monitoring device shall be designed with an alarm that records and signals to the operator any excursion equal to or above 0.5 inches W.C. across either level or 1.0 across both.

(2) During outages of 96 hours or more, PNM shall inspect the demisters based on manufacturers' recommendations for deposit which are not cleaned by the clean wash water spraying.

Recordkeeping:

(1) PNM shall record hourly the pressure drop across each demister.

(2) Record the time and dates of all 3 hour averages equal to or above 0.5 inches W.C. for either of the two (2) levels or 1.0 combined.

(3) Record the corrective action taken to return the demister back to normal operation.

(4) Record the findings from the demister inspections.

(5) Record when manual cleaning is performed.

Reporting: Quarterly reporting is required in accordance with the Consent Decree, Section X, Reporting, Paragraphs 22-26. Once the Consent Decree is terminated then the quarterly reports shall be prepared and maintained onsite in accordance with Condition B110.A. The Quarterly reports will continue to be summarized in the semi-annual reporting.

J. 40 CFR 60, Subpart D (Units E301, E303, and E304)

Requirement: The units are subject to 40 CFR 60, Subpart D and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart D.

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 60, Subpart D.

Recordkeeping: Records of compliance with applicable recordkeeping requirements of 40 CFR Part 60, Subparts A and D.

Reporting: In accordance with applicable reporting requirements of 40 CFR Part 60, Subparts A and D.

K. Coal Pulverizer Unit E201

Requirement: The coal pulverizers (E201) shall be entirely enclosed in a structure that is maintained and operated in accordance with good air pollution control practices in order to

minimize particulate emissions. (NSR 63M6R1, Condition 1.k)
Monitoring: Annual operational inspection, no less than once per calendar year, PNM shall inspect the coal pulverizers to insure they meet the requirements. (NSR 63M6R1, Condition 3.g)
Recordkeeping: In accordance with Section B109, PNM shall record the results of the inspections for the coal pulverizes. (NSR 63M6R1, Condition 4.i).
Reporting: No reporting required in accordance with Section B110.A of this permit.

A403 Engines

A. Units E602, E603, E604, E605, E606, and E607 (emergency generators)

Requirement: Units shall burn only No. 2 Diesel Fuel Oil. (NSR 63M6R1, Condition 1.l) Except for maintenance and testing activities, units shall only be operated during the unavoidable loss of commercial utility power. Each emergency generator shall not operate more than 500 hours per year. Compliance with this requirement shall be determined using hours of operation data. (NSR 63M6R1, Condition 1.m)
Monitoring: Monitor emission by maintaining records to demonstrate that only No. 2 Diesel Fuel Oil was used and that each unit did not operate more than 500 hours per calendar year during an unavoidable loss of commercial utility power. PNM shall monitor the operating hours of the emergency generators. (NSR 63M6R1, Condition 3.i)
Recordkeeping: In accordance with Section B109, PNM shall record the monthly and 12 month total operating hours of each emergency generator. (NSR 63M6R1, Condition 4.k)
Reporting: No reporting is required in accordance with Section B110.A of this permit.

B. Opacity (Units E602, E603, E604, E605, E606, and E607)

Requirement: In accordance with 20.2.61.109. NMAC, the owner or operator of stationary combustion equipment shall not permit, cause, suffer or allow visible emissions from the stationary combustion equipment to equal or exceed an opacity of 20 percent; provided, however, stationary combustion equipment which is regulated by Parts 20.2.10 NMAC through 20.2.18 NMAC, 20.2.37 NMAC, and 20.2.42 NMAC, and any other Part of Chapter 2 which specifically limits particulate emissions is exempted from this Part. The emergency generators are subject to 20.2.61.109 NMAC. (NSR 63M6R1, Condition 2.i)
Monitoring: The engines do not burn natural gas, therefore, opacity measurements shall be performed on a quarterly basis per calendar year for each unit.
Recordkeeping: Record the opacity measurements on a quarterly basis.
Reporting: No reporting required in accordance with Section B110.A of this permit

A404 Heaters - Not Required

A405 Cooling Towers

A. Operational Requirements for Units E406, E407, E408, E409, E410, and E411

Requirement: Cooling towers shall be maintained and operated according to manufacturer's recommendations and good engineering practices, and the circulating water rate, total dissolved solids (TDS) content of that water, and the drift rate for the units shall not exceed the values specified in Table 405.A below. Compliance with these limits shall be determined using data generated by the monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 2.j)
Monitoring: PNM shall measure the TDS concentration of each cooling tower no less than once each calendar quarter. (NSR 63M6R1, Condition 3.k)
Recordkeeping: In accordance with Section B109, no less than once each calendar quarter, the permittee shall record the TDS concentration of each cooling tower. The permittee shall then calculate and record the individual cooling tower PM emissions quarterly, based on the maximum capacity of the circulating water pump(s) for each unit, the actual TDS content, and the units specific drift rate. (NSR 63M6R1, Condition 4.m)
Reporting: No reporting required in accordance with Section B110.A of this permit.

Table 405.A, Circulating Rate, TDS, and Drift Rate Operational Limits for Cooling Towers

Emission Unit No.	Circulating Water Rate	TDS Content	Drift Rate
E406	170,000 gallons/minute	0.0459 lb/gallon	0.002%
E407	165,000 gallons/minute	0.0459 lb/gallon	0.002%
E408	220,000 gallons/minute	0.0459 lb/gallon	0.0015%
E409	227,500 gallons/minute	0.0459 lb/gallon	0.002%
E410	5,000 gallons/minute	0.03756 lb/gallon	0.002%
E411	30,000 gallons/minute	0.0292 lb/gallon	0.002%

A406 Haul Roads/Storage piles (Coal-Fired Plants)

A. Road Area Operational Requirements Units E701, E702, E703, E704, E705, E706, and E707

Requirement: Road areas shall comply with the operational requirements specified in Table 406.A. Compliance is demonstrated by monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 1.i)
Monitoring: The permittee shall monitor emissions by maintaining a log/records of the times and location of water application, the times and location of sweeping, amount of water applied to the haul road, occurrences of visual inspections and by performing weekly visual inspections of the road area to determine that emissions are minimized. (NSR 63M6R1,

Condition 4.c)
Recordkeeping: In accordance with Section B109, the records will be maintained on site for review.
Reporting: No reporting required in accordance with Section B110.A of this permit.

Table 406.A, Operational Requirements for Road Areas

Emission Unit No.	Operational Requirements
E701, E705, and E708	Unit shall be paved, and swept and watered as necessary, to minimize emissions of TSP and PM_{10}
E702, E703, E704, E706, and E707	Unit shall be watered as necessary to minimize emissions of TSP and PM_{10}

B. Facility-Wide Raw Material Limits

Requirement: The facility shall not process more than the quantities of raw materials specified in Table 406.B. Compliance with this limit shall be determined using data generated here. (NSR 63M6R1, Condition 1.n, and revised)
Monitoring: The permittee shall monitor and record facility-wide raw material usage on a quarterly basis. PNM shall monitor the quantities of coal, diesel fuel, and limestone processed. (NSR 63M6R1, Condition 3.j) For each 24-hour period, the permittee shall monitor the coal flows in each boiler. (NSR 63M6R1, Condition 3.l)
Recordkeeping: In accordance with Section B109, PNM shall maintain quarterly and annual-to-date records of the quantities of coal, diesel fuel, and limestone processed. (NSR 63M6R1, Condition 4.l, revised)
Reporting: No reporting required in accordance with Section B110.A of this permit.

Table 406.B, Facility-Wide Operational Limits on Raw Materials

Material	Annual Limit
Coal	8,200,000 tons
No. 2 Diesel Fuel Oil	4,112,500 gallons (4 million gpy for the coal fired boilers and 112, 500 gpy for the emergency generators)
Limestone	227,000 tons

C. Good Air Pollution Control Practices

Requirement: Coal pile maintenance (E101, E102, E103, and E104), fly ash silo unloading to trucks (E507, E508, E509, E510), limestone delivery system, and limestone pile maintenance (E802) shall be operated in accordance with good air pollution control practices to minimize emissions. (NSR 63M6R1, Condition 1.o)
Monitoring: No less than once each calendar year, PNM shall inspect the coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance. (NSR 63M6R1, Condition 3.h)
Recordkeeping: In accordance with Section B109, PNM shall record the results of the

inspection for the coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance. (NSR 63M6R1, Condition 4.j) Records and/or logs of control practices to demonstrate compliance with the controls in the permit application shall be maintained and summarized in the Semi-annual reports.
Reporting: No reporting required in accordance with Section B110.A of this permit.

D. NSPS Subpart OOO (Units E803, E804, and E805 (limestone process equipment))

Requirement: Allowable emission limits
Monitoring: The units are subject to and shall comply with the requirements of 40 CFR 60, Subpart A and of 40 CFR 60, Subpart OOO, 60.675(c) for monitoring emissions.
Recordkeeping: In accordance with the applicable requirements of 40 CFR 60, Subpart OOO, 60.676(f). Records of any periodic opacity determinations will be maintained.
Reporting: In accordance with the applicable requirements of 40 CFR 60, Subpart OOO. Opacity test results will be submitted to the NMED.

A407 Storage Silos (activated carbon, fly ash)

A. Activated Carbon Silo Baghouses (Units E901, E902, E903, and E904)

Requirement: Activated Carbon for Mercury emissions control (1) Each of the activated carbon silos shall be equipped with a baghouse operated according to manufacturer's guidelines and specification. The baghouse shall have a design PM emission rate of 0.0092 grains/scf or less and a design baghouse exhaust flow rate of 578 scfm. (NSR 63M6R1, Condition 1.v) (2) The activated carbon shall be introduced into the exhaust stream prior to the baghouse used to control particulate matter from the respective boilers. (NSR 63M6R1, Condition 1.w) (3) Each activated carbon baghouse shall be equipped and operated with a device to continuously monitor the pressure differential across the baghouse to insure continued compliance. (NSR 63M6R1, Condition 1.x)
Monitoring: PNM shall monitor the pressure drop across each activated carbon silo baghouse whenever the silos are loaded. The data capture rate shall be no less than once every six minutes. At a minimum the record shall include the silo designation, date, time, pressure differential, and in the event that the pressure differential is not continually monitored, the silo loading status (fan on or off). (NSR 63M6R1, Condition 3.f)
Recordkeeping: PNM shall follow the General Recordkeeping requirement in Section B109. (1) PNM shall keep manufacturer's documentation onsite indicting that each activated carbon silo baghouse was designed to control PM emissions 0.0092 grains/scf or less and design baghouse exhaust flow rate is 578 scfm. (NSR 63M6R1, Condition 4.h) . (2) PNM shall keep records of the pressure drop across each activated carbon silo baghouse. (NSR 63M6R1, Condition 4.f) (3) PNM shall keep the manufacturer's documentation onsite that indicates the proper range that the pressure drop should be during normal operations of each activated carbon silo baghouse. (NSR 63M6R1, Condition 4.g)
Reporting: No reporting required in accordance with Section B110.A of this permit.

B. Fly Ash/Limestone Silo Baghouses

Requirement: The fly ash silo loading (E505, E506, E518, and E519) and limestone silo loading (E803) shall be equipped and operated with baghouses. The baghouses shall be equipped and operated with devices to monitor the differential pressure drop across the baghouse. The control devices shall be operated and maintained in accordance with manufacturer's specifications, including specifications for pressure drop, in order to achieve a minimum 99.5% control of TSP, PM_{10}, and PM emissions. Compliance with these requirements shall be determined using data generated and by Department inspections of the units. (NSR 63M6R1, Condition 1.j)
Monitoring: The permittee shall monitor emissions by measuring the pressure drop across each filter, daily. (NSR 63M6R1, Condition 3.d) PNM shall monitor and record the pressure drop across each fly ash silo baghouse (Units 505 and 506). (NSR 63M6R1, Condition 3.d) For baghouse associated with the Units E505, E506, E518, E519 and E803, PNM shall monitor the differential pressure drop across the baghouses daily. (Units 505 and 506). (NSR 63M6R1, Conditions 3.n and 4.t)
Recordkeeping: In accordance with Section B109, PNM shall record the daily pressure drop measurements for each baghouse. (NSR 63M6R1, Condition 4.d)
Reporting: No reporting required in accordance with Section B110.A of this permit.

PART B GENERAL CONDITIONS

B100 Introduction

A. Not Applicable

B101 Legal

A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)

(1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the Federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the Federal Act. (20.2.70.302.A.2.a NMAC)

(2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)

(a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.

(b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.

(3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)

(4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)

(5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)

(6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)

(7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)

(8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)

(9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or Federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)

(10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)

(11) A responsible official (as defined in 20.2.70.7.AD NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)

(12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)

(13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)

B. Permit Shield (20.2.70.302.J NMAC)

(1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table 103.A. The requirements in Table 103.A are applicable to this facility with specific requirements identified for individual emission units.

(2) The Department has determined that the requirements in Table 103.B as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.

(3) This permit shield does not extend to administrative amendments (Subsection A of 20.2.70.404 NMAC), to minor permit modifications (Subsection B of 20.2.70.404 NMAC), to changes made under Section 502(b)(10), changes under Paragraph 1 of subsection H of 20.2.70.302 of the Federal Act, or to permit terms for which notice has been given to reopen or revoke all or part under 20.2.70.405 and 20.2.70.302J(6).

(4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)

C. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

A. This permit is issued pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("State Act") and regulations adopted pursuant to the State and Federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.

B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.

C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)

D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the Federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act. (20.2.70.302.A.5 NMAC)

E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the Modification and Exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

B104 Appeal Procedures
(20.2.70.403.A NMAC)

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm N2153
P.O. Box 5469
Santa Fe, New Mexico 87502

B105 Submittal of Reports and Certifications

A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us.

B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)

C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B

Santa Fe, NM 87507-3113

D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section
US EPA Region-6, 6EN-AA
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).

B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)

B107 Startup, Shutdown, and Maintenance Operations

A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements
(20.2.70. 302.A and C NMAC)

A. These requirements do not supersede or relax requirements of federal regulations.

B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this

permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.

(1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

(2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

(3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.

F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it

shall be recorded to document operating conditions and shall be included with the monitoring report.

G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

H. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.

B109 General Recordkeeping Requirements
(20.2.70.302.D NMAC)

A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):

(1) equipment identification (include make, model and serial number for all tested equipment and emission controls);

(2) date(s) and time(s) of sampling or measurements;

(3) date(s) analyses were performed;

(4) the company or entity that performed the analyses;

(5) analytical or test methods used;

(6) results of analyses or tests; and

(7) operating conditions existing at the time of sampling or measurement.

B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)

C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents,

contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)

D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)

E. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):

(1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)

(2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

(3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized limit.

B110 General Reporting Requirements
(20.2.70.302.E NMAC)

A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.

B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)

C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:

(1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)

(2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).

D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.

G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.

H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)

I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)

(1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

(2) The permittee and department shall attach each such notice to their copy of the relevant permit.

B111 General Testing Requirements

A. Compliance Tests

(1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)

(2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

(3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

(4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.

(5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.

(6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

(1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of 40 CFR 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by 40 CFR 60, Appendix A:

(a) Methods 1 through 4 for stack gas flowrate

(b) Method 5 for TSP

(c) Method 6C and 19 for SO_2

(d) Method 7E for NO_X (test results shall be expressed as nitrogen dioxide (NO_2) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO_2 is equivalent to 1.194 x 10-7 lb/SCF)

(e) Method 9 for opacity

(f) Method 10 for CO

(g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).

(h) Method 7E or 20 for Turbines per 60.335 or 60.4400

(i) Method 29 for Metals

(j) Method 201A for filterable PM_{10} and $PM_{2.5}$ (Dry Stacks)

(k) Method 5, 5B or 5I for filterable PM_{10} and $PM_{2.5}$ (Wet Stacks)

(l) Method 202 for condensable PM

(m) Method 320 for organic Hazardous Air Pollutants (HAPs)

(n) Method 25A for VOC reduction efficiency

(2) Alternative test method(s) may be used if the Department approves the change.

C. Periodic Monitoring and Portable Analyzer Requirements

(1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

(2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

(3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.F.

(4) During emissions tests, pollutant, O_2 concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.

(5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

(1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test to afford a representative of the Department an opportunity to be present at the test. (40CFR 60.8(d))

(2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.

(3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.

(4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.

(5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.

(6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

(7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 <u>Compliance</u>

A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required

by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)

B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)

C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)

D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at email:reportsgroup.aqb@state.nm.us. For additional reporting guidance see http://www.nmenv.state.nm.us/aqb/enforce_compliance/TitleVReporting.htm. (20.2.70.302.E.3 NMAC)

E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):

(1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;

(2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;

(3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and

(4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the Federal Act.

B113 Permit Reopening and Revocation

A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)

(1) Additional applicable requirements under the Federal Act become applicable to a major source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.

(2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.

(3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.

(4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.

B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

B114 Emergencies
(20.2.70.304 NMAC)

A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

(2) This facility was at the time being properly operated;

(3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and

(4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B115 Stratospheric Ozone
(20.2.70.302.A.1 NMAC)

A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices, except for motor vehicle air conditioners (MVAC) and MVAC-like appliances. (40 CFR 82.156)

(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (40 CFR 82.158)

(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (40 CFR 82.161)

B116 Acid Rain Sources
(20.2.70.302.A.9 NMAC)

A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.

B. Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions are incorporated into this permit and are federally enforceable.

C. Emissions exceeding any allowances held by the permittee under Title IV of the Federal Act or the regulations promulgated thereunder are prohibited.

D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.

E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Federal Act.

G. The acid rain permit is an enclosure of this operating permit.

B117 Risk Management Plan
(20.2.70.302.A.1 NMAC)

A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.

B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.

C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.

(1) Excess Emission Form (for reporting deviations and emergencies)

(2) Compliance Certification Report Form

(3) Universal Stack Test Notification, Protocol and Report Form and Instructions

(4) SOP for Use of Portable Analyzers in Performance Tests

C101 Definitions

A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmers Almanac or from http://www.almanac.com/rise/).

B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.

C. **"Fugitive emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (20.2.70.7M NMAC)

D. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. (20.2.70.7Q NMAC)

E. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)

F. **"Natural Gas Liquids"** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)

G. **"National Ambient Air Quality Standards"** means the primary (health-based) and secondary (welfare-related) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act. (20.2.72.7Q NMAC)

H. **"NO_2"** or **"Nitrogen dioxide"** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NO_2. (20.2.2.7U NMAC)

I. **"NOx"** see NO_2

J. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the Federal Act. (20.2.72.7Y NMAC)

K. "**Restricted Area-Non Military**" 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 a 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.

L. **"Shutdown"**, for requirements under 20.2.72.7BB NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

M. **"SSM"**, for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.

(1) **"Shutdown"**, for requirements under 20.2.7.7H NMAC, means the cessation of operation of any air pollution control equipment or process equipment.

(2) **"Startup"**, for requirements under 20.2.7.7I NMAC, means the setting into operation of any air pollution control equipment or process equipment.

N. **"Startup"**, for requirements under 20.2.72.7DD NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB ..... 2-stroke lean burn
4SLB ..... 4-stroke lean burn
4SRB ..... 4-stroke rich burn
acfm ..... actual cubic feet per minute
AFR ..... air fuel ratio
AP-42 ..... EPA Air Pollutant Emission Factors
AQB ..... Air Quality Bureau
AQCR ..... Air Quality Control Region
ASTM ..... American Society for Testing & Materials
BTU ..... British Thermal Unit
CAA ..... Clean Air Act of 1970 and 1990 Amendments
CEM ..... continuous emissions monitoring
cfh ..... cubic feet per hour
cfm ..... cubic feet per minute
CFR ..... Code of Federal Regulation
CI ..... compression ignition
CO ..... carbon monoxide
COMS ..... continuous opacity monitoring system
EIB ..... Environmental Improvement Board
EPA ..... United States Environmental Protection Agency
gr./100 cf ..... grains per one hundred cubic feet
gr./dscf ..... grains per dry standard cubic foot
GRI ..... Gas Research Institute
H_2S ..... hydrogen sulfide
HAP ..... hazardous air pollutant
hp ..... horsepower

IC ..... Internal Combustion
KW/hr ..... kilowatts per hour
lb/hr ..... pounds per hour
lb/MMBtu ..... pounds per million British Thermal Unit
MACT ..... Maximum Achievable Control Technology
MMcf/hr ..... million cubic feet per hour
MMscf ..... million standard cubic feet
N/A ..... not applicable
NAAQS ..... National Ambient Air Quality Standards
NESHAP ..... National Emission Standards for Hazardous Air Pollutants
NG ..... natural gas
NGL ..... natural gas liquids
NMAAQS ..... New Mexico Ambient Air Quality Standards
NMAC ..... New Mexico Administrative Code
NMED ..... New Mexico Environment Department
NMSA ..... New Mexico Statues Annotated
NOx ..... nitrogen oxides
NSCR ..... non-selective Catalytic Reduction
NSPS ..... New Source Performance Standard
NSR ..... New Source Review
PEM ..... parametric emissions monitoring
PM ..... particulate matter (equivalent to TSP, total suspended particulate)
PM_{10} ..... particulate matter 10 microns and less in diameter
$PM_{2.5}$ ..... particulate matter 2.5 microns and less in diameter
pph ..... pounds per hour
ppmv ..... parts per million by volume
PSD ..... Prevention of Significant Deterioration
RATA ..... relative accuracy test assessment
RICE ..... reciprocating internal combustion engine
rpm ..... revolutions per minute
scfm ..... standard cubic feet per minute
SI ..... spark ignition
SO_2 ..... sulfur dioxide
SSM ..... Startup Shutdown Maintenance (see SSM definition)
TAP ..... Toxic Air Pollutant
TBD ..... to be determined
THC ..... total hydrocarbons
TSP ..... Total Suspended Particulates
tpy ..... tons per year
ULSD ..... ultra-low sulfur diesel
USEPA ..... United States Environmental Protection Agency
UTM ..... Universal Transverse Mercator Coordinate System
UTMH ..... Universal Transverse Mercator Horizontal
UTMV ..... Universal Transverse Mercator Vertical
VHAP ..... volatile hazardous air pollutant
VOC ..... volatile organic compounds

C103 Acid Rain Permit, P062AR2 Appendix A

C104 CAM Plan Appendix B

Compliance Assurance Monitoring Plan

prepared in support of the

San Juan Generating Station

P062R2

OPERATING PERMIT RENEWAL APPLICATION

Submitted by

Public Service Company of New Mexico

July 2010

Compliance Assurance Monitoring Plan

prepared in support of the

San Juan
Generating
Station
P062R2

OPERATING PERMIT
RENEWAL APPLICATION

Introduction

SJGS operates under Title V Operating Permit P-062R1. Operating Permit P062R1 was issued on February 4, 2005. A Title V renewal application was submitted to the New Mexico Environment Department in February 2009. The renewal application included several modifications that either had been made or were in progress to implement the provisions of a Consent Decree filed in the United States District Court, District of New Mexico. The court entered this consent decree on May 10, 2005. The consent decree contains emission limit requirements for nitrogen oxides (NOx), sulfur dioxide (SO_2) and particulate matter (PM) that are in addition to previously existing permit limits. The consent decree also places a limit of 20 percent opacity on E302 (Unit 2). As a pre-NSPS unit, Unit 2 had not previously been subject to the NSPS based opacity limits.

The Title V permit renewal application submitted in February 2009 did not, for several reasons, include specific updates to SJGS CAM Plan. These reasons include: work was still in progress on some of the units, and insufficient operational experience had been obtained on the other units to establish appropriate CAM parameters. This revised CAM plan is being submitted to update the SJGS CAM Plan to reflect the facility modifications that were addressed in the Title V renewal application.

The consent decree based environmental upgrades include changes in operations and emission limits for SO_2, NOx, opacity (for Unit 2) and PM. However, SJGS uses CEMS to determine compliance with SO_2 and NOx emission limits and COMS to determine compliance with opacity emission limits. The CEMS for SO_2 and NOx are required under acid rain regulations and, therefore, exempt SO_2 and NOx from CAM requirements. Even if CAM was applicable to SO_2 and NOx, CEMS are considered presumptively acceptable to fulfill all requirements of the 40 CFR 64 CAM rule. COMS are required on all SJGS units per the requirements of SJGS NSR permit 0063-M6R1. Therefore, this CAM plan revision addresses PM only.

- **Control Equipment**

  A.1 Filterable Particulate Matter , Boiler Units 1, 2, 3 and 4 (permit units E301, E302, E303 and E304) – Babcock and Wilcox Fabric Filter (1 fabric filter system per unit).

- **Applicable Regulations, Emission Limits, Monitoring Requirements**

  B.1 Filterable Particulate Matter

  Applicable Regulations

  20.2.14 NMAC

  20.2.70 NMAC (Operating Permit No. P062R1)

  20.2.72 NMAC (NSR Permit No. 0063-M6R1)

  40CFR60 Subpart D (Units E301, E303, E304)

  Consent Decree (applicable consent decree limits are being incorporated into this Operating Permit renewal)

  Emission Limits

Basis for Limit	*Unit 1 (E301)*	*Unit 2 (E302)*	*Unit 3 (E303)*	*Unit 4 (E304)*
NSR/Operating Permit/20.2.14 NMAC	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg
NSR/Operating Permit/ 40CFR60 Subpart D NSPS	0.1 lbs/mmBtu, 3-hr avg	NA	0.1 lbs/mmBtu, 3-hr avg	0.1 lbs/mmBtu, 3-hr avg
20.2.14NMAC (PM2 limit as an alternate to the 0.05 PM limit)	0.02 lbs/mmBtu, 30-day average	0.02 lbs/mmBtu, 30-day average	0.02 lbs/mmBtu, 30-day average	0.02 lbs/mmBtu, 30-day average
Operating Permit (TPS and PM10 limits)	174.8 lbs/hr	173.9 lbs/hr	271.6 lbs/hr	266.5 lbs/hr
Consent Decree Limits	0.015 lbs/mmbtu, 3-hr avg.	0.015 lbs/mmbtu, 3-hr avg.	0.015 lbs/mmbtu, 3-hr avg.	0.015 lbs/mmbtur, 3-hr avg.

  Monitoring Requirements

SJGS must perform quarterly compliance tests for PM10 and PM2.5 using EPA Method 5 per conditions 6. b and c of NSR Permit No. 0063-M6R1.

- **Monitoring Approach**

C.1 Filterable Particulate Matter

Indicators

- 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).

- Differential pressure drop across the fabric filter on each unit.

- By-pass damper position (open/closed) indicator.

Measurement Approach

- The COMS system is operated per the procedures specified in 40 CFR 60 Subpart D.
- Differential pressure (in inches of water) is measured across each fabric filter system with a continuous monitoring system averaged over 1-minute periods.
- 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 six (6) 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 sub-contractors 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:

(1) Evaluation of opacity monitor or monitors indicating high values.

(2) Evaluation of the differential pressure drop measurement instruments indicating high values.

(3) Evaluation of operating data relevant to fabric filter system air pulse cleaning system for the affected fabric filter.

(4) Evaluation of access hatches and physical integrity of ducts and fabric filter equipment for the affected fabric filter system.

(5) Evaluation of fabric filter solids handling equipment for the affected system.

(6) 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.

- **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.

- 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 6.0 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.

- **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 6.0 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.

- **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.

C105 Expansion Joint Maintenance Program Appendix C

San Juan Generating Station
Expansion Joint Maintenance Program

The goal of the Expansion Joint Maintenance Program is to minimize leaks from the boiler exit duct expansion joints. This will be accomplished through quarterly inspections and a maintenance program.

1. Inspections
   Boiler exit duct expansion joint inspections will be completed at least once a quarter. The person conducting the inspection will be competent based on experience or training. The inspector will view every expansion joint from a safe viewpoint that is a normal walk area. All leaks discovered will be noted, and an estimation of the area of the leak will be made. Inspection forms, including maps of the boiler exits ducts and expansion joints are included as an attachment.
   The person conducting the inspection will insure that work requests are written on all leaks discovered. He will send a copy of the inspection to Environmental Services. Environmental Services will keep a copy of the inspection for a minimum of five years.

2. Maintenance
   Leaks will be repaired as soon as reasonably possible.
   Upon receipt of the work request, the Planning department will schedule maintenance as soon as reasonable possible. Usually, the unit will have to be off line for repairs to occur.

   Upon receipt of the quarterly inspection, Environmental Services will contact planning and review the guidelines for repairs. These guidelines are:
   A. If the total area of the leaks is 0.25 square feet or less, all identified leaks will be scheduled for repairs during the next scheduled outage of 21 days or longer.
   B. If the area of the leaks is greater than 0.25 square feet and less than 0.40 square feet, repairs will be made during the next unit scheduled or forced outage of 4 or more days. The repairs will reduce the total area of leaks to 0.25 square feet or less. To insure repairs were effective, the expansion joints will be inspected within 5 days of the Unit returning to service.
   C. If the leaks total over 0.40 square feet, immediate action will be made to reduce the impacts of the leaks. This may include putting temporary or partial patches over the leaks. If leaks cannot be minimized with the unit on line, a unit outage will be scheduled within 21 days of the determination that the leak cannot be minimized with the unit on line.