

**TECHNICAL REVIEW AND EVALUATION OF APPLICATION
FOR
SALT RIVER PROJECT – CORONADO GENERATING STATION**

AIR QUALITY TITLE V PERMIT # 52639

I. INTRODUCTION

This Class I, Title V permit renewal is for the continued operation of Salt River Project's Coronado Generating Station which is located 6 miles northeast of St. Johns off U.S. Highway 191 in St. Johns, Apache County, Arizona. This permit is a renewal of Air Quality Title V Permit #30732.

II. Company Information

Company Name: Salt River Project Agricultural Improvement and Power District (SRP)

Facility Name: Coronado Generating Station (CGS)

Mailing Address: PO Box 52025, PAB 352
Phoenix, AZ 85072-2025

Facility Location: Six miles Northeast of St. Johns off U.S. Highway 191
St. Johns, AZ 85936

Attainment Classification: Apache County is designated as Unclassifiable/Attainment for the
(Source: 40 CFR §81.303) National Ambient Air Quality Standards (NAAQS) for criteria pollutants

III. FACILITY DESCRIPTION

A. Process Description

SRP Coronado operates two coal-fired electric utility steam generating units. The two units have a combined electrical output capacity of 912 gross megawatts (MW). Electrostatic precipitators and wet flue gas desulfurization systems are operated to control particulate matter emissions and sulfur dioxide emissions, respectively. Low-NO_x Burners and Overfire Air are used to control nitrogen oxide emissions. Beginning on or before January 1, 2012, calcium bromide will be applied to the coal to control mercury emissions. Beginning on or before June 1, 2014, Selective Catalytic Reduction (SCR) will be installed on Unit 2 to provide additional control of nitrogen oxide emissions.

An auxiliary boiler is used to provide auxiliary steam during startup if main boiler steam or turbine extraction steam is unavailable. Other operations at the plant include a main power building, coal mixing facilities, coal and ash handling facilities, ash disposal area, limestone handling equipment, process water treatment facilities, a forty-three mile railroad spur, water storage reservoirs, a 330 acre evaporation pond for non-recoverable waters, mechanically induced draft cooling towers, 500 kV and 69 kV switchyards and water supply from satellite well fields. The power plant commenced construction on July 25, 1974.

The below table lists the maximum process rates and operating hours of the main units:

Table 1: Maximum Estimated Process Rates

Unit	Maximum Hours of Operation	Maximum Steam Output	Nominal Electric Generation (Gross)
Unit 1 Boiler	8,760	2,747,000 lbs/hr	456 MW
Unit 2 Boiler	8,760	2,747,000 lbs/hr	456 MW
Auxiliary Boiler	< 10% Annual Average Capacity Factor	105,000 lbs/hr	---

B. Air Pollution Controls

The following air pollution control equipment is currently installed and operating, or planned to be installed on Units 1 and 2 as part of the Coronado Emission Control Project (CECP):

Hot-Side Electrostatic Precipitators (ESP)
Wet Flue Gas Desulfurization Units
Low-NO_x Burners and Overfire Air
Selective Catalytic Reduction (Unit 2 Only)
Baghouses
Dust Extractors

Hot-side electrostatic precipitators (ESP) are designed to remove 99.875 percent of the ash from the boiler flue gas. Two ESPs are provided for each unit and divided into two halves. Each half is provided with a single level of six parallel chambers consisting of seven fields each. The fly ash collected in the precipitator hoppers is pneumatically transferred to fly ash storage bins. Fly ash is unloaded from these bins into trucks and transported to the ash disposal area at CGS. The ash is deposited in layers and the layers are compacted, stabilized, and covered with wet bottom ash to eliminate dusting and wind erosion.

Particulate matter emissions from material handling in the coal, fly ash, limestone, and other systems are controlled by baghouses or dust extractors.

Two four-stage horizontal wet flue gas desulfurization (FGD) units are installed and operating on Unit 1 to reduce SO₂ emissions. A vertical countercurrent flow limestone FGD unit is currently installed and operating on Unit 2. The existing horizontal FGD units on Unit 1 are planned to be replaced with a single vertical countercurrent FGD unit, identical to the one installed on Unit 2, in 2012. Limestone slurry and water treatment sludge are used as reagents in the FGD system. A limestone handling system, complete with unloading, stack out and crushing facilities processes the limestone. Baghouses and wet dust extractors are provided on the limestone storage silos for dust control.

On December 19, 2008, the United States District Court for the District of Arizona entered a Consent Decree executed by SRP and the United States Environmental Protection Agency (EPA) to upgrade air quality control equipment for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) at CGS. The upgrade project, referred to as the Coronado Emissions Control Project (CECP), includes the addition of new low-NO_x burners (LNB) and new scrubber systems to Unit 1 and 2. In addition,

SRP will install a selective catalytic reduction (SCR) system on Unit 2. The changes associated with the CECP were approved in 2008 under significant revision #46326. Table 2 lists the equipment installation status:

Table 2: Control Equipment Installation Status

Equipment	Unit 1	Unit 2
Low-NO _x burners	Installed & Operational since 2009	Installed & Operational since June 2011
New FGD systems	To be installed & Operational by January 1, 2013	Installed & Operational since May 2011
SCR	None	To be installed & Operational by June 1, 2014

II. EMISSIONS

The facility is classified as a Major Source pursuant to Arizona Administration Code (A.A.C.) R18-2-101.64. The facility's potential emissions exceed the major source thresholds for NO_x, CO, SO₂, VOCs, PM₁₀, and HAPs pollutants. Table 3 summarizes the potential to emit (PTE) for the facility and Table 4 summarizes the PTE for each emissions unit.

Table3: PTE Facility-Wide Emissions*

Pollutant	Tons per Year 2005	Tons per Year (Future) *
PM ₁₀	4,323	2,003
VOC	117	143
SO ₂	33,771	8,271
NO _x	29,052	8,291
CO	991	20,674
Federal HAPs	> 25 tpy Total HAPs > 10 tpy Individual HAP	

*Following completion of all of the changes associated with the CECP

Table 4: PTE Emissions of Criteria Pollutants*

Unit	PM10	SO _x	NO _x	VOC	CO
Unit 1 Boiler (Coal)	826	4,134	6,614	71	10,335
Unit 2 Boiler (Coal)	963	4,134	1,654	71	10,335
Auxiliary Boiler (Fuel Oil)	2	3	12	0.1	2
Emergency Generators	0.2	0.1	6	0.2	1
Emergency Fire Pump	0.1	0.1	2	0.1	0.4
Booster Pump	0.1	0.1	5	0.1	1
Coal Handling	36				

Limestone Handling	6	
Fly Ash	0	
Cooling Towers	78	
Coal Piles	0.5	
Limestone Piles	0.1	
Fly Ash Disposal	7	
Vehicular Traffic & Off-Road Machinery	3	

* Following completion of all of the changes associated with the CECP

Table 5 lists the operating parameters of the steam generating units and the auxiliary boiler.

Table 5: Typical Operating Parameters

Description	Units 1 & 2 Boilers	Auxiliary Boiler
Maximum Annual Process Rate	24,063,720,000 lbs (steam)	919,800,000 lbs (steam)
Maximum Hourly Process Rate	2,747,000 lbs (steam)	105,000 lbs (steam)
Maximum Hourly Theoretical Heat Input	4,719 MMBtu/hr	157.34 MM Btu/hr
Type of Fuel Used	Coal, Oil, Used Oil	Fuel Oil
Quantity of Fuel Used/Year	35,040,000 MMBtu	32,000 barrels of oil
Maximum Hourly Use	4,719 MMBtu	7,528 lb
Higher Heating Value of Fuel (max)	8,710 Btu/lb	20,900 Btu/lb
Sulfur Content	0.54%	N/A
Density of oil (lb/gal)	N/A	6.97

III. COMPLIANCE HISTORY

Since the issuance of the previous permit on December 21, 2005, 2 on-site inspections were conducted and no violation was noted during the first inspection. The second inspection was conducted as a result of a complaint that the facility emitted black smoke. Upon inspection, the inspectors did not observe any violation. The inspectors noted that SRP had completed the installation of new low-NO_x burner on Unit 1. All quarterly Monitoring and Semiannual Compliance Certifications were submitted on time and no violations were noted. Annual performance tests conducted showed compliance with the permit limits.

On December 19, 2008, the US EPA and SRP entered into a Consent Decree in which SRP agreed to upgrade the air pollution control systems at CGS to reduce emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂). In addition, SRP agreed to install PM continuous emission monitoring systems (CEMS), and to accept a lower particulate matter emission limit. Table 2 above lists the status of the equipment upgrade and installation timelines.

IV. APPLICABLE REGULATIONS

The Permittee has identified the applicable regulations that apply to each unit in its permit application. Table 6 below summarizes the findings of the Department with respect to the regulations that are applicable to each emissions unit. Previous permit conditions are discussed under Section VI of this technical review document.

Table 6: Applicable Regulations

Unit ID	Start-up date	Control Equipment	Applicable Regulations	Verification
Units 1 & Unit 2	7/25/74	-ESP (2/unit), -Low-NOx Burners, -Wet FGD -SCR on Unit2 (to be installed)	<u>40 CFR Part 60</u> <u>Subpart D</u> 60.42(a)(1) 60.42(a)(2) 60.43(a)(1) & (c) 60.44(a)(2), & (3) 60.44(b) 60.45(a) 60.45(g)(1), (2), & (3) 60.46(b)(1), (2), (3), & (5) 60.46(b)(5) 60.46(d)(1) <u>40 CFR Part 64</u> CAM <u>A.A.C.</u> R18-2-903.1 & 903.3	The units commenced construction after August 17, 1971 and are greater than 73 MW capacity. There are standards for PM, SO ₂ , NOx and Opacity are included.
Auxiliary Boiler	7/25/74	None	<u>A.A.C.</u> R18-2-724.A, B, C.1, E, G, J & K	The heat input of this unit is 157 MMBtu/hr (<250 MMBtu/hr) and the date of construction is prior to the trigger date (6/9/89) for 40 CFR 60, Subpart Da. Hence, this unit is subject to R18-2-724. The unit is subject to an opacity standard of 15% and SOx standard of 1.0 lb/MMBtu.
Generator and Emergency Fire pumps*		None	<u>A.A.C.</u> R18-2-719.A, B, C.1, E, F, I, H, J, K <u>NESHAP</u> 40 CFR 63 Subpart <u>ZZZZ</u>	The engines are subject to state requirements. Subpart <u>ZZZZ</u> requirements are applicable only to the fire pump (<500hp at a major source). Other ICEs > 500hp are exempt from Subpart <u>ZZZZ</u> requirements. NSPS Subpart III is not applicable since the engines were built before July 2006.

Unit ID	Start-up date	Control Equipment	Applicable Regulations	Verification
Limestone Handling		Baghouses and Wet Dust Extractors	<u>A.A.C.</u> R18-2-702.B R18-2-720.B.2 R18-2-612 R18-2-722.F R18-2-722.G NSPS OOO	The A.A.C. regulations listed are applicable to existing Lime Manufacturing Plants. Certain sources within the Limestone Handling System are also subject to NSPS OOO.
Coal Handling		Baghouses and Wet Dust Extractors	<u>A.A.C.</u> R18-2-702.B R18-2-716.B, D, E	The regulations listed are applicable to existing Coal Preparation Plants
Fly Ash Handling		Baghouses	<u>A.A.C.</u> R18-2-702.B R18-2-730.A.1.b	The regulations listed are applicable to existing unclassified sources.
Cooling Towers		None	<u>A.A.C.</u> R18-2-702.B R18-2-730.A.1.b R18-2-730.D, & G.	The regulations listed are applicable to existing unclassified sources.
Fugitive Dust	N/A	Control Measures	<u>A.A.C.</u> R18-2-602 R18-2-604.A, & B. R18-2-605 R18-2-606 R18-2-607 R18-2-612	The regulations listed are applicable to non point sources
Abrasive Blasting	N/A	Wet blasting, enclosure or equivalent approved by director	<u>A.A.C.</u> R18-2-726 R18-2-702.B	Relevant requirements applicable to abrasive blasting
Spray Painting	N/A	Control measures that attain 96% efficiency	<u>A.A.C.</u> R18-2-727 R18-2-702.B	Relevant requirements applicable to spray painting
Mobile Sources	N/A	Control Measures	<u>A.A.C.</u> R18-2-801 R18-2-802.A R18-2-804	These regulations are applicable to all mobile sources regulated under A.A.C. Title 18, Chapter 2, Article 8.
Demolition / Renovation	N/A	None	<u>A.A.C.</u> R18-2-1101.A.8 (NESHAPs for asbestos)	Relevant requirements applicable to demolition and renovation operations

V. PREVIOUS PERMITS AND CONDITIONS

A. Previous Permits

Table 6 below table lists the previous permits that have been issued to SRP Coronado.

Table 6: Previous Permits

Permit Number / Permit Type	Issued Date	Affected Equipment	Description of Change
42684 R18-2-317 change	12/2006	ESPs	Rapper replacements
43208 – R18-2-317 change	2/5/2007	Dust Collectors (DC-4, -5d, -5e, -5f) in Unit 2 coal gallery	New Engart Dust Extractor System – Dust laden air picked up by a fan is subjected to countercurrent water spray which is then passed through a woven knit-mesh extractor panel to remove dust laden slurry. Increased efficiency >99.6%.
44900 – Minor Revision	12/13/2007	Coal Silo	Addition of Coal Additive soda ash silo (Capacity: 3000 cu.ft.) Baghouse (Capacity: 750 cfm)
46236 – Significant Revision	1/22/2009	Unit 1 & 2 Boilers	Addition of New Low-NOx burners, SCR (Unit 2 only), New Wet Limestone FGD Systems and PM CEMS
46361 – R18-2-317 change	12/28/2007	DC-2 Baghouse (Capacity: 16,200 cfm)	New Engart Dust Extractor (Capacity: 11,500 cfm). Increased efficiency >99.6%.
48052 – Significant Revision	Withdrawn		
48511 – R18-2-317 Change	9/15/2008	DC-3 DC-5-1, DC-5-2, DC-5-3 Baghouses in coal handling area	Replaced with Engart Type 30 Dust Extraction System (DES) Replaced with single Engart Type 18 DES
49759 – R18-2-317 change	3/27/2009	Unit 1 tubes in super heater/reheater Unit 1 feed water heater	Replaced with new tubes Like-kind replacement
50171 – R18-2-317 change	6/2/2009	Limestone handling system	Use of temporary limestone conveying system (hopper & screw conveyors) until existing system is upgrade as approved in SR46236
50966 – Minor Revision	8/2/2010	Revisions to Limestone Handling System & Dry Bottom Ash Handling	-Transfer Tower renamed “TT-1” and dust collector replaced with Wet Dust Extractor, DC-12 -New Transfer Tower “TT-2” and dust collector replaced with Wet Dust

		System previously approved under SR 46236	Extractor, DC-13 -Conveyor Belt A renamed "BC-101B" -Lime Storage Silo (300 tons) replaced with 2 bins (each 73 tons capacity) each equipped with new Bin Vent Filters (DC-14 & DC-15) -Bin Vent Filter DC-14 renamed "DC-16"
51780 – Significant Revision	02/28/11	Unit 1 & 2	- Early mercury control strategy as an alternative plan for delaying requirements of AACR18-2-734(B) until Dec 31, 2015 - Reduction done by use of chemical oxidant in feed coal that will oxidize in the boiler furnace and subsequently removed in the limestone slurry circulating in the sulfur dioxide scrubbers

B. Previous Permit Conditions

The following are discussions on the previous permits that have been issued to the source.

CLASS I, TITLE V OPERATING PERMIT NO. 30732

This operating permit was issued to SRP Coronado on 12/11/2005 to operate their two coal-fired dry bottom steam electric generating units.

OP #30732, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Att. A.	X				General provisions – References to NESHAP added
Att. B.I.A, B, & C.		X			Unit 1 & 2 operational requirements
Att. B.I.D.3.1	X				CAM plan revised to reflect use of PM CEMS and Wet FGD
Att. B.I.E, F, G, H, I, & J		X			No changes
Att. B.I.K	X				Revised to clarify monitoring
Att. B.III		X			PM Standard of 43 nanograms per joule heat input for the boilers of Units 1 and 2
Att. B.IV	X				NESHAP Subpart ZZZZ requirements added for fire pump less than 500hp
Att. B.V, VI, VII, VIII, IX, X, XI, & XII		X			Coal, limestone & flyash handling, Cooling towers, Used-oil specifications, fugitive emissions and other periodic emissions
Attachment "C"	X				Equipment List – revised to reflect new equipment added

OP #30732, References	Determination				Comments
	Revise	Keep	Delete	Stream-line	
Attachment "D"	X				Phase II Acid Rain Provisions – revised to reflect the most recent years' data.

VI. COMPLIANCE ASSURANCE MONITORING (CAM) (40 CFR 64) FOR UNITS 1 AND 2:

A. Particulate Matter

1. Background

a. Emission Unit

Description: Coal Fired Steam Electric Generating Units
Unit Identification: Unit 1 and Unit 2
Air Pollution Control ID: ESP 1 and ESP 2
Wet FGDs
Facility: Coronado Generating Station

b. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation: A.A.C. R18-2-901.2 (40 CFR 60, Subpart D)
Emission Limit: PM<0.1 lb/MMBtu
Monitoring Requirements: Continuous Opacity Monitoring System (COMS)

c. Control Technology Hot-Side Electrostatic Precipitators
Wet FGD

d. Monitoring PM CEMS

2. Monitoring Approach

Until the installation of the wet FGD system, the primary and secondary indicators are as follows:

Primary Indicator – Measure opacity using COMS

Secondary Indicator - Measure secondary current and voltage

Excursion – when opacity is at or over 18% and the secondary current and voltage are outside the range established previously.

After the installation of the wet FGD, and prior to the Department’s approval of the secondary indicators proposed based on the PM CEMS Correlation Testing, the primary and secondary indicators are as follows:

Primary Indicator – Measure secondary current and voltage

Secondary Indicator - Monitor operational status of the limestone slurry recycle pumps

Excursion – when all pumps are non operational and the secondary current and voltage are outside the range established previously.

After the Department's approval of the secondary indicators proposed based on the PM CEMS Correlation Testing, the primary and secondary indicators are as follows:

Primary Indicator – PM emissions as measured by the CEMS

Secondary Indicator - Indicators established during CEMS correlation test

Excursion – when PM emissions exceed 0.028 lbs/MMBtu and outside the range of indicators established during the correlation test.

3. Monitoring Approach Justification

Until the FGD is installed, opacity was selected as the primary performance indicator because, as the opacity of emissions increases, it can be reasonably assumed that PM emissions increase. In addition, the facility has historically been required by permit to conduct annual PM testing, and past data indicates that the unit opacity limits provide a significant margin of compliance with the PM limits. The indicator range selected for opacity is a 1-hour rolling average opacity of less than 18%.

The secondary indicator range is the electrical parameters (secondary current and voltage for each section of each ESP). Both ADEQ and EPA had agreed that monitoring the current and voltage on a continuous basis allows for a more accurate way of determining how the ESPs operated. Having continuous data of the electrical parameters allows the Department and EPA the flexibility to determine if the facility is in compliance in the future.

Upon installation of the FGD and until the Department's approval of the secondary indicators proposed based on the PM CEMS Correlation Testing, monitoring of the operational status of the limestone slurry recycle pumps associated with the wet FGD would provide a reasonable approach to ensuring PM control. The new wet FGD contains four limestone slurry recycle pumps. Each pump is connected to a separate level of sprays in the FGD absorber. The recycle pumps are either on or off; the flow rate associated with the pumps cannot be altered manually. At least one pump is running at all times when the boiler is operating. Additional pumps are operated as needed to maintain compliance with the SO₂ emission limit in the permit based on the unit's operation and the coal sulfur content. The operational status of each pump is recorded continuously in the plant Digital Control System (DCS) historian based on the pump amperage.

Upon installation and operation of the PM CEMS, PM emissions will be measured directly. The feasibility of operating the PM CEMS is determined under a 2-year demonstration period. If after the 2-year period, the PM CEMS are determined to be infeasible, new parameters will be established at that time.

CAM Plan Summary*

Indicator and its measurement approach	Opacity from the stack shall be the primary indicator and continuous opacity monitoring systems (COMS) will be used as the measurement approach. The secondary indicator will be the electrical parameters (current and voltage) for each section of each ESP. Until PM CEMS is operated, the pump operation of the FGD will be continuously measured.
Indicator Range	The indicator range for opacity will be over a 1 hour

	rolling average of less than 18% opacity. The indicator range for the electrical parameters will be the same as previously established. Upon installation of the CEMS, new secondary parameters will be established during the correlation test. Upon approval of the new parameters, the Permittee will monitor and record the data.
Data representativeness	The data will represent normal operating conditions; this will exclude startup, shutdown, and malfunctions.
Verification of operational status	N/A
QA/QC practices and criteria	SRP is required by the permit to meet the QA/QC requirements of 40 CFR 60, Appendix B, Performance Specification 1, "Specification and Test Procedures for Opacity and PM Continuous Emission Monitoring Systems in Stationary Sources"
Monitoring Frequency	The COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The source will also monitor and record the electrical parameters on a continuous basis (at least once every 15 minutes) for each section of each ESP. The FGD pump operation will be monitored continuously. The CEMS will be in continuous operation.
Data Collection Procedure	SRP will reduce all data from the COMS to 6-minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
Averaging period	SRP will be required the monitor the opacity over a 1-hour averaging period.

* The CAM Plan summarized in this table applies until the new wet FGD systems are installed on each unit. At that time, the applicable CAM requirements are those described in the Section VI.A.3.

B. Sulfur Oxides

The source is subject to the sulfur dioxide standard of 0.8 lb/MMBtu heat input in A.A.C. R18-2-903.1 while burning coal. After installation and commencement of operation of the FGD, the source is subject to a 30-day rolling average SO₂ removal efficiency of at least 95% or a 30-day rolling average SO₂ emissions rate no greater than 0.08 lbs/MMBtu. The Permittee is required to operate a continuous emissions monitoring system (CEMS) for recording emissions of sulfur dioxide. The CEMS will be used as CAM for sulfur dioxide for both units. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 75.

C. Nitrogen Oxides

The units are subject to the nitrogen oxide standard of 0.70 lb/MMBtu heat input in 40 CFR

60.44(a)(3) when burning coal and 0.30 lb/MMBtu in 60.44(a)(2) when burning fuel oil. If burning a combination of coal and fuel oil, the units are subject to the standard calculated by the equation of 40 CFR 60.44(b). After installation and commencement of operation of the low- NO_x burners, the source is subject to a 30-day rolling average NO_x emissions rate of 0.32 lbs/MMBtu and upon installation of the SCR on Unit 2, the source is subject to a 30-day rolling average NO_x emissions rate of 0.08 lbs/MMBtu. In addition, after installation and commencement of operation of the SCR, the source is subject to an annual plant-wide rolling total not to exceed 7,300 tons of NO_x emissions. Compliance test results indicate that the units are able to meet the standard. The Permittee is required to operate a continuous emissions monitoring system (CEMS) for recording emissions of nitrogen oxides. The CEMS will be used as CAM for nitrogen oxide for both units. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 75.

VII. PERIODIC MONITORING

A. Unit 1 and 2 Boilers

1. Opacity

The units are subject to an opacity standard of 20% under 40 CFR 60.42(a)(2). There is an exception that allows for one six-minute period per hour of not more than 27% opacity. In accordance with 40 CFR 60.11(c), this limitation is exempt during periods of startup, shutdown, or malfunction. The source provided specific definitions for these three categories which are included in the permit conditions.

The Permittee is required to operate a continuous monitoring system for opacity. This monitor will be used as the periodic monitoring method. The monitoring system is required to meet the requirements of 40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1. In accordance with Permit #30732, the Permittee shall maintain two sets of opacity filters, one to be used as calibration standards and one to be used as audit standards.

2. Fuel

Permittee is restricted to burning only coal, Number 2 fuel oil, and on specification used oil in the boilers. In addition, the Permittee is required to maintain a record of any change in fuel type.

B. Auxiliary Boiler

1. Opacity

The boiler is subject to the opacity standard of 15% in A.A.C. R18-2-724.J. The Permittee will be required to conduct a weekly survey of visible emissions emanating from Auxiliary Boiler. If the opacity of the emissions observed exceeds 15%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 15%, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The Permittee is also required to monitor and record the number of hours fuel oil is burned continuously in the units.

2. Particulate Matter

This unit is subject to the particulate matter emissions standard in A.A.C. R18-2-724.C.1. Because fuel oil is burned in the boiler, the Permittee is required to monitor particulate matter emissions by monitoring the fuel burned in the unit. The Permittee is also required to monitor the following information about the fuel found in the contractual agreement with the liquid fuel vendor:

- a. Heating value; and
- b. Ash content.

Although ash content by itself is not a valid measure of particulate matter emissions, monitoring this would help the agency to “ballpark” the particulate matter emissions. No engineering estimation using ash content is prescribed in the permit since it could be interpreted to incorrectly correlate particulate matter emissions to ash content only. The Permittee is also required to keep on record a copy of the contractual agreement and notify the Director within 30 days of any change in the contractual agreement.

As part of this Title V renewal, ADEQ is hereby removing the annual performance test for PM because potential PM emissions from the boiler are less than 1 tpy, which is less the allowable emission rate set forth by the process rate weight equation.

3. Sulfur Oxides

The boiler is subject to sulfur dioxide standard in A.A.C. R18-2-724.E. Because the unit burns fuel oil, the emissions standard is 1.0 lb/MMBtu. The Permittee is required to keep on record fuel supplier certification including the following information:

- a. The name of the oil supplier;
- b. The sulfur content and the heating value of the fuel from which the shipment came from; and
- c. The method used to determine the sulfur content of the oil.

Permittee is required to make engineering calculations for SO_x emissions using the information from above according to the following equation for each fuel delivery:

$$\text{SO}_2 \text{ (lb/MMBtu)} = 2.0 \times [(\text{Weight percent of sulfur}/100) \times \text{Density (lb/gal)}] / [(\text{Heating value (Btu/gal)}) \times (1 \text{ MMBtu}/1,000,000 \text{ Btu})]$$

4. Fuel

The Permittee is not allowed to burn high sulfur oil (>0.9% by weight) as a fuel unless it is demonstrated that low sulfur oils aren't available. In addition, Number 2 fuel oil and on specification used oil may be burned in the auxiliary boiler.

C. Internal Combustion Engines

1. Opacity

The generators or internal combustion engines are subject to a 40% opacity limitation. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the internal combustion engines. If the opacity of the emissions observed exceeds 40%, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 40%, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed.

2. Particulate Matter

The source is required to monitor the lower heating value of the fuel being combusted in the internal combustion engines. Compliance with this requirement may be demonstrated by maintaining copy of the fuel supplier certification specifying the lower heating value.

3. Sulfur Dioxide

The source is not allowed to burn high sulfur fuel, and is limited to emissions of sulfur dioxide to 1.0 pound per million Btu heat input. The source is required to maintain records of daily sulfur content and lower heating value of the fuel fired in the internal combustion engines. This may be accomplished by keeping a copy of the fuel supplier certification specifying the sulfur content and lower heating value of the fuel.

4. Hazardous Air Pollutants

The source is required to operate the emergency fire pump (less than 500 hp) engine only for emergency use and up to 100 hours of required maintenance and testing. Of the 100 hours, the source may operate the fire pump up to 50 hours in non-emergency situations. Operation of the engine in accordance with the manufacturer's plan is required. Monitoring involves oil and filter change every 500 hours of operation and inspection of air cleaner every 1000 hours of operation. A non-resettable hour-meter is required to log the operational hours. These requirements are effective May 03, 2013.

D. Coal Handling

1. Opacity

The coal handling facility is subject to a 20% opacity standard, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the coal handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action

performed. The source is also required to keep a record of the corrective action performed.

2. Particulate Matter

The source is subject to the particulate matter standard in A.A.C. R18-2-716.B.2. The Permittee is required to maintain and operate the baghouses and wet dust extractors in accordance with the manufacturer's specification. Permittee is also required to hold these specifications on file. Emissions related maintenance work needs to be recorded.

E. Limestone Handling

1. Opacity

The limestone handling plant is subject to a 20% opacity standard, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the limestone handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed.

Certain sources within the Limestone Handling System are also subject to NSPS OOO. NSPS OOO requires monitoring liquid flow rate and pressure drop for each of the Wet Dust Extractors (DC-12 and DC-13). In addition, NSPS OOO requires the Permittee to conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7) on the Bin Vent Dust Collectors (DC-14, DC-15, and DC-16).

2. Particulate Matter

The source is subject to the particulate matter standard in A.A.C. R18-2-720.B.2. The Permittee is required to maintain and operate the Bin Vent Dust Collectors and Wet Dust Extractors in accordance with the manufacturer's specification. Permittee is also required to hold these specifications on file. Emissions related maintenance work must be recorded.

F. Fly Ash Handling

1. Opacity

The fly ash handling plant is subject to a 20% opacity standard, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the fly ash handling facility. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of

the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed

2. Particulate Matter

The source is subject to the particulate matter standard in A.A.C. R18-2-730.B.1. The Permittee is required to maintain and operate the baghouses in accordance with the manufacturer's specification. Permittee is also required to hold these specifications on file. Emissions related maintenance work must be recorded.

G. Cooling Towers 1 and 2

SRP does not use Chromium-6 in the cooling towers at the Coronado Generating Station. Therefore, they are not subject to MACT for cooling towers under 40 CFR Part 63, Subpart Q.

1. Opacity

The cooling tower is subject to the opacity standard of 20% opacity standard, as stated in A.A.C. R18-2-702. The Permittee will be required to conduct a weekly survey of visible emissions emanating from the cooling towers. If the opacity of the emissions observed exceeds the opacity standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee will be required to keep records of the initial survey and any EPA Reference Method 9 observations performed. These records will include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of the opacity standard, the Permittee will be required to initiate appropriate corrective action to reduce the opacity below the standard. The Permittee will keep a record of the corrective action performed. The source is also required to keep a record of the corrective action performed

2. Particulate Matter

The units are also subject to particulate matter emissions standard under A.A.C. R18-2-730.A.1.

H. Fugitive Emissions

The standards in Article 6 of the Arizona Administrative Code (A.A.C.) are applicable requirements for non-point sources. The following sources will be monitored:

1. Driveways, parking areas, vacant lots
2. Unused open areas
3. Open areas (Used, altered, repaired, etc.)
4. Construction of roadways
5. Material transportation
6. Material handling
7. Storage piles

8. Stacking and reclaiming machinery at storage piles

All of these areas must comply with the opacity limitation of 40%. The control measures for most of these activities include dust suppressants and/or wetting agents and reasonable precautions. To conduct open burning, Permittee must obtain a permit from ADEQ, or the local officer in charge of issuing burn permits.

The Permittee is required to make a bi-weekly survey of the visible emissions from all non-point sources. The Permittee is required to create a record of the date on which the survey was taken, the name of the observer, and the results of the survey. If the visible emissions do not appear to exceed the standard, the Permittee would note in the record that the visible emissions were of low opacity, and it did not require a Method 9 to be performed.

If the Permittee finds that on an instantaneous basis the visible emissions are in excess of the opacity standard, then he is required to make a six-minute Method 9 observation. If this observation indicates opacity in excess of the standard, then the Permittee is required to report it as excess emissions. In addition, the Permittee is required to adjust the process equipment or process control equipment to bring the opacity below the standard. If the Permittee finds that the visible emissions is less than the opacity standard, then the Permittee is required to record the source of emission, date, time, and result of the test.

Monitoring and recordkeeping requirements for the nonpoint sources include a record of the date and type of activity performed, and the type of controls used. Also, monitoring requirements for the applicable open burning rule may be satisfied by keeping all open burn permits on file.

I. Other Periodic Activities

1. Abrasive Sand Blasting

SRP has indicated in the permit application that abrasive sand blasting activities are conducted on-site. The applicable requirements are A.A.C. R18-2-726 and A.A.C. R18-2-702(B) and are included in the permit. Monitoring requirements include:

- a. Date project was conducted;
- b. Duration of project;
- c. Type of control measures employed

2. Spray Painting

SRP has indicated in the permit application that spray painting activities are conducted on-site. The applicable requirements are A.A.C. R18-2-727 and A.A.C. R18-2-702(B) and are included in the permit. A.A.C. R18-2-727(A) and A.A.C. R18-2-727(B) are included in the approved State Implementation Plan (SIP). A.A.C. R18-2-727(C) and A.A.C. R18-2-727(D) are also a part of the approved SIP. They are present in the definitions section of the SIP as R9-3-101.117. EPA approved SIP provision R9-3-527.C is not present in the amended rule. However, R9-3-527.C is an applicable requirement, and is federally enforceable until the current State SIP is approved by the EPA. Monitoring requirements include:

- a. Date project was conducted;
- b. Duration of project;
- c. Type of control measures employed;
- d. Material Safety Data Sheets for all paints and solvents used in the project.

3. Mobile Sources

The Permittee is required to keep a record of all emissions related maintenance activities performed on Permittee's mobile sources stationed at the facility as per manufacturer's specifications for the purposes of monitoring and recordkeeping

4. Asbestos Demolition/Renovation

The Permittee is required to keep a record of all required paperwork on file for the purposes of monitoring and recordkeeping. The required paperwork includes "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

5. Non-vehicle Air Conditioner Maintenance and/or Services

The Permittee is required to keep a record of all paperwork required by the applicable requirements of 40 CFR 82 - Subpart F on file for the purposes of monitoring and recordkeeping.

J. Used Oil Fuel

All of the previous permit conditions regarding used oil fuel have been incorporated into this Title V permit. The Permittee is required to burn only on-site generated on-specification used oil with contaminants less than the following:

Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
PCBs	2 ppm
Total Halogens	1000 ppm

In addition, the flash point of the used oil shall not fall below 100 degrees Fahrenheit. The amount of used oil shall not exceed 350 barrels annually. This requirement carried over from a prior permit condition.

Recordkeeping and reporting requirements include semi-annual report which contains an inventory of the fuel oil used throughout the year. Testing requirements include a test for chlorinated solvents prior to burning and an annual test for arsenic, cadmium, chromium, and lead.

VIII. TESTING REQUIREMENTS

A. Unit 1 and Unit 2 Boilers

SRP is required to perform annual performance tests for opacity, particulate matter, SO₂ and NO_x in accordance with 40 CFR Part 60, Subpart D.

1. Particulate Matter

The Permittee is required to perform annual tests for particulate matter emissions using EPA

Reference Methods 5, 5b, or 17.

2. Sulfur Dioxide

The testing requirements for sulfur dioxide have been removed on account of the fact that they are included in the QA/QC requirements of the Acid Rain provisions for the CEMs.

3. Nitrogen Oxides

The testing requirements for nitrogen oxides have been removed on account of the fact that they are included in the QA/QC requirements of the Acid Rain provisions for the CEMs.

B. Limestone Handling

1. Opacity

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, the Permittee is required to conduct an initial performance test for opacity for the bin vent filters (DC-14, DC-15 and DC-16).

2. Particulate Matter

Within 60 days after achieving the maximum production rate, but not later than 180 days after the installation of second flue gas desulfurization unit, the Permittee is required to conduct an initial performance test for PM/PM₁₀ for the wet dust extractors (DC-12 and DC-13).

C. Used Oil Fuel

1. The Permittee shall test all used oil prior to burning for chlorinated solvents by using EPA Method 9007.
2. The Permittee test a representative sample of the use fuel oil annually for Arsenic, Cadmium, Chromium, and Lead using approved EPA Methods.

IX. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)(40 CFR 63)

Stationary Reciprocating Internal Combustion Engines (RICE)(Subpart ZZZZ)

This MACT is applicable to stationary RICE located at major sources of Hazardous Air Pollutant (HAP) emissions. An affected facility does not have to be a major source of HAPs to be subject to this MACT. It only has to be located at a major source of HAP emissions. Since the SRP Coronado facility is major for HAPs this MACT needs to be listed as a potentially applicable requirement.

According to 40 CFR 63.6590(b)(3), any existing emergency engines over 500 horsepower located at the facility are exempt from all requirements of this subpart and of subpart A of the 40 CFR 63. No initial notification is required. The only engines at the SRP Coronado facility are the emergency generator (938hp) built in 1978 and the two emergency fire pumps (800 hp & 266 hp) built in 1977, as stated in the equipment list of the permit. The generator and one fire pump over 500 hp are exempt from the RICE MACT while the small engine is subject to the requirements of this subpart.

X. INSIGNIFICANT ACTIVITIES

The following table includes a list of activities proposed by SRP Coronado to be insignificant. This table includes an evaluation of whether the activity can be deemed as insignificant pursuant to A.A.C. R18-2-101.57.

The following activities were proposed to be insignificant in the permit application (activities in redline format are being evaluated for significance):

S. No.	Activity	Insignificant	Comment
1	5,000 gallon sulfuric acid storage tank	Yes	No applicable requirement
2	7,000 gallon sodium hydroxide storage tank	Yes	No applicable requirement
3	5,000 gallon copper corrosion inhibitor storage tank (50% water solution of sodium tolytriazole)	Yes	No applicable requirement
4	3,000 gallon coagulant storage tanks (aqueous sodium aluminate solution) (2)	Yes	No applicable requirement
5	5,000 gallon antiscalant/dispersant storage tank (aqueous solution of sodium phosphonate and polyacrylates)	Yes	No applicable requirement
6	2,000 lb pH control/hardness conditioning storage tank (phosphates) and 400 gallon morpholine	Yes	No applicable requirement
7	400 gallon oxygen scavenger storage tank (aqueous modified amino compound)	Yes	No applicable requirement
8	1250 gallon corrosion inhibitor (aqueous solution of borate, nitrate and nitrite)	Yes	No applicable requirement
9	15,000 gallon vehicle diesel fuel storage tank (2)	Yes	A.A.C. R18-2-101.54.c
10	1,000,000 gallon fuel oil storage tank (#2 diesel fuel)	Yes	No applicable requirement
11	10,000 gallon unleaded gasoline storage tank (2)	Yes	A.A.C. R18-2-101.54.b
12	10 nitrogen cylinders at 7500 scf each	Yes	A.A.C. R18-2-101.54.i
13	15 hydrogen cylinders at 7500 scf each	Yes	A.A.C. R18-2-101.54.i
14	12 chlorine cylinders at 1 ton each	No	SRP is subject to 40 CFR Part 68 for chlorine, which has a threshold of 25 lbs.
15	16,000 gallon turbine lube oil storage tank	Yes	No applicable requirement
16	550 gallon hydraulic oil HD 100 storage tank (2)	Yes	No applicable requirement
17	550 gallon AW machine oil 150 storage tank (2)	Yes	No applicable requirement
18	550 gallon AW machine oil 68 storage tank (2)	Yes	No applicable requirement
19	550 gallon AW machine oil 32 storage tank (2)	Yes	No applicable requirement
20	550 gallon hydraulic fluid storage tank (2)	Yes	No applicable requirement
21	550 gallon ethylene glycol storage tank (2)	Yes	No applicable requirement
22	550 gallon almasol gear lube 90 weight storage tank (2)	Yes	No applicable requirement
23	mineral oil storage tank	Yes	No applicable requirement
24	lube oil vapor extractors	No	There is an applicable requirement (A.A.C. R18-2-730)

25	generator vapor extractors	No	There is an applicable requirement (A.A.C. R18-2-730)
26	boiler feed pump	Yes	No applicable requirement
27	50,000 gallon bearing cooling water (2)	Yes	No applicable requirement
28	15,000 gallon brine sump	Yes	No applicable requirement
29	miscellaneous steam vents	Yes	No applicable requirement
30	paint building with controls	No	There is an applicable requirement (A.A.C. R18-2-727)
31	sandblasting/welding/metal fabrication with controls	No	There is an applicable requirement (A.A.C. R18-2-726)
32	permitted asbestos landfill	No	There is an applicable requirement (40 CFR 61 Subpart M)
33	miscellaneous rotating machinery less than 325 aggregate bhp	No	There is an applicable requirement (A.A.C. R18-2-719)
34	IC engine compressors	No	Subject to A.A.C R18-2-719
35	Quality control/assurance laboratory	Yes	A.A.C. R18-2-101.54.i
36	Drum storage and handling	Yes	No applicable requirement
37	Boiler feedwater water treatment and storage	Yes	No applicable requirement
38	Process water treatment and storage	Yes	No applicable requirement
39	On-site domestic wastewater and sewage treatment (10,000 gal/day)	Yes	No applicable requirement
40	Housekeeping activities and associated cleaning products	Yes	No applicable requirement
41	Heating ventilation & air conditioning equipment not designed to remove air contaminants	Yes	No applicable requirement
42	General office activities	Yes	No applicable requirement
43	Restroom facilities and associated cleanup operations and vents	Yes	No applicable requirement
44	Normal consumer use of consumer products including hazardous substances as defined in 15 U.S.C. 1261 et. seq.	No	The hazardous substances defined are too general to be considered insignificant. The source may request for specific substances to be evaluated for insignificance
45	Vacuum cleaning systems used exclusively for commercial/industrial purposes	Yes	No applicable requirement
46	Landscaping and site housekeeping activities	Yes	A.A.C. R18-2-101.54.a
47	Fugitive emissions from landscaping activities	Yes	A.A.C. R18-2-101.54.a
48	Use of pesticides, fumigants, and herbicides	Yes	No applicable requirement
49	Groundskeeping activities and products	Yes	A.A.C. R18-2-101.54.a
50	Firefighting activities and training conducted at the source in preparation for fighting fires	No	There is an applicable requirement (A.A.C. R18-2-602)

51	Open burning activities	No	There is an applicable requirement (A.A.C. R18-2-602)
52	Flares used to indicate danger	Yes	No applicable requirement
53	Activities associated with the construction, repair, or maintenance of roads or other paved or open areas, including operation of street sweepers, vacuum trucks, spray trucks or other vehicles related to the control of fugitive emissions of such roads or other areas	No	There is an applicable requirement (A.A.C. R18-2-604)
54	Road and lot paving operations	No	There is an applicable requirement (A.A.C. R18-2-605)
55	Cindering of streets and roads to abate traffic hazards caused by ice and snow	Yes	No applicable requirement
56	Street and parking lot striping	No	There is an applicable requirement (A.A.C. R18-2-604)
57	Fugitive dust emissions from the operation of passenger vans, automobiles, station wagons, pickup trucks, or vans at a stationary source	No	There is an applicable requirement (A.A.C. R18-2-604)
58	Equipment using water, water and soap or detergent, or a suspension of abrasives in water for the purposes of cleaning or finishing	Yes	No applicable requirement
59	Construction and disturbance of surface areas for purposes of land development (must still comply with AAC title 18, Chapter 2, Article 6 and other applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-604)
60	Activities at a source associated with the maintenance, repair, or dismantlement of an emissions unit or other equipment installed at the source, including preparation for maintenance, repair or dismantlement and preparation for subsequent startup, including preparation of a shutdown vessel for entry, replacement of insulation, welding, cutting, and steam purging of a vessel prior to startup; also includes maintenance, repair or dismantlement of building, utility lines, pipelines, wells, excavation, earthworks, and other structures that do not constitute and emissions unit (must comply with all applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-730)
61	Containers, reservoirs or tanks used exclusively in dipping operations to coat objects with oils, waxes, or greases	No	There is an applicable requirement (A.A.C. R18-2-730)
62	Activities directly used in the diagnosis and treatment of injury or other medical condition	Yes	No applicable requirement
63	Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning, and associated venting	Yes	A.A.C. R18-2-101.54.f

64	Various emissions points such as: sampling points, analyzers, process instrumentation, individual burners and sootblowers (emissions calculated as aggregate from generating units); transportable test equipment; individual flanges, valves, pump seals, pressure relief valves, and other individual components with the potential for leaks (must comply with applicable requirements).	No	There is an applicable requirement (A.A.C. R18-2-730)
65	Brazing, soldering, or welding operations	Yes	No applicable requirement
66	Battery recharging areas	Yes	No applicable requirement
67	Aerosol can usage	Yes	No applicable requirement
68	Plastic pipe welding	Yes	No applicable requirement
69	Acetylene, butane and propane torches and their use	Yes	No applicable requirement as long as remain under 10,000 lb as stated in 40 CFR 68.130
70	Architectural painting and associated surface preparation for maintenance purposes (must comply with applicable requirements)	No	There is an applicable requirement (A.A.C. R18-2-727)
71	Steam vents, condenser vents, and boiler blowdown	Yes	No applicable requirement
72	Equipment used exclusively for portable steam cleaning	Yes	No applicable requirement
73	Blast cleaning equipment using a suspension of abrasives in water and any exhaust system or collector serving them exclusively	Yes	No applicable requirement
74	Surface impoundments such as ash ponds, cooling ponds, evaporation ponds, settling ponds, and storm water ponds	No	There is an applicable requirement (A.A.C. R18-2-730)
75	Pump/motor oil reservoirs	Yes	No applicable requirement
76	Transformer vents	Yes	No applicable requirement
77	Lubricating system reservoirs	Yes	No applicable requirement
78	Hydraulic system reservoirs	Yes	No applicable requirement
79	Adhesive use not related to production	Yes	No applicable requirement
80	Caulking operations not part of production process	Yes	No applicable requirement
81	Electric motors	Yes	No applicable requirement
82	High voltage induced corona	Yes	No applicable requirement
83	Safety devices such as fire extinguishers	Yes	No applicable requirement
84	Soil gas sampling	Yes	No applicable requirement
85	Filter draining	Yes	No applicable requirement
86	General vehicle maintenance and servicing activities	Yes	No applicable requirement with the exception being any activity contained in 40 CFR 82
87	Station transformers	Yes	No applicable requirement
88	Circuit breakers	Yes	No applicable requirement
89	Storage cabinets for flammable products	Yes	No applicable requirement
90	Fugitive emissions from any landfill operations (if landfill not otherwise subject to federal applicable requirement)	No	There is an applicable requirement (A.A.C. R18-2-731)

XI. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AERMOD	Air Dispersion Model
MM Btu/hr	Million British Thermal Units per hour
BACT	Best Available Control Technology
CAS	Combustion Air Systems
CECP	Coronado Emissions Control Project
CEMS	Continuous Emission Monitoring Systems
CFR	Code of Federal Regulations
CGS	Coronado Generating Station
CO	Carbon Monoxide
COHPAC	Compact Hybrid Particulate Collector
CS-ESP	Cold Side Electro Static Precipitator
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitators
FF	Fabric Filter
FGD	Flue Gas Desulphurization
°F	Degree Fahrenheit
GCP	Good Combustion Practices
H ₂ SO ₄	Sulfuric Acid
HAP	Hazardous Air Pollutant
HS-ESP	Hot Side Electro Static Precipitator
lb/hr	Pound per Hour
LEAR	Lowest Achievable Emission Rate
LNB	Low NO _x Burners
LOI	Loss on Ignition
NAAQS	National Ambient Air Quality Standard
NNSR	Non-attainment New Source Review
NO _x	Nitrogen Oxides
PM	Particulate Matter
PM ₁₀	Particulate Matter Nominally less than 10 Micrometers
PRB	Powder River Basin
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit or Permanent Total Enclosure
RACT	Reasonably Available Control Technology
RBLC	RACT/BACT/LAER Clearinghouse
SAM	Sulfuric Acid Mist
SCR	Selective Catalytic Reduction
SIL	Significant Impact Level
SO ₂	Sulfur Dioxide
SRP	Salt River Project
WESP	Wet electrostatic precipitation
VOC	Volatile Organic Compound