

SUPPORTING DOCUMENTATION ON EMISSIONS UNIT BART ELIGIBILITY ANALYSIS

1.0 SOURCE WIDE BART ELIGIBILITY CRITERIA

On April 4, 2005, the Stationary Sources Joint Forum (SSJF) of the Western Regional Air Partnership (WRAP) published a draft report identifying BART-eligible sources in the WRAP region. This report took a broad-brush approach to reviewing existing stationary sources of air pollution in order to determine whether or not emissions units at the facility could be considered to be BART-eligible. The report explains that the following series of steps were used to identify potentially BART-eligible facilities in the WRAP region:

- Step 1. Identify the facilities that have categorical sources (i.e. one of the 26 source categories);
- Step 2. Identify whether or not any of the emissions units at the facility are within the date range of BART;
- Step 3. Determine whether or not the potential emissions of the entire facility (all emissions units) are greater than 250 tons per year of visibility impairing pollutants.

2.0 UNIVERSE OF BART ELIGIBLE SOURCES

Appendix H of the April 4, 2005 draft report identifying potentially BART-eligible sources in the WRAP Region specifically identified a list of sources under the jurisdiction of the Arizona Department of Environmental Quality (ADEQ), the Maricopa Air Quality Department (MCAQD), the Pima County Department of Environmental Quality (PDEQ) and the Pinal County Air Quality Control District (PCAQCD). The list included the following sources:

2.1 ADEQ Regulated Fossil Fuel Steam Generators

- 2.1.1. Arizona Electric Power Cooperative (Apache Station)*
- 2.1.2. Arizona Public Service Company – Cholla*
- 2.1.3. Arizona Public Service Company - Yucca*
- 2.1.4. Salt River Project Company – Coronado Generating Station*

2.2 ADEQ Regulated Portland Cement Manufacturers

- 2.2.1. Arizona Portland Cement Company*

2.3 ADEQ Regulated Primary Copper Smelters

- 2.3.1. ASARCO – Hayden Smelter*

2.4 ADEQ Regulated Nitric Acid Plants

- 2.4.1. Apache Nitrogen Products*

2.5 ADEQ Regulated Lime Manufacturers

- 2.5.1. Chemical Lime Company – Douglas*
- 2.5.2. Chemical Lime Company – Nelson*

2.6 ADEQ Regulated Fossil Fuel Boilers > 250 MMBtu/hr Heat Input

- 2.6.1. Abitibi Consolidated Sales Corporation – Abitibi Consolidated Snowflake*
- 2.6.2. Phelps Dodge Morenci Mine*

2.7 MCAQD Regulated Fossil Fuel Steam Generators

- 2.7.1. Arizona Public Service Company – West Phoenix Power Plant*
- 2.7.2. Arizona Public Service Company – Ocotillo Power Plant*
- 2.7.3. Salt River Project – Agua Fria Generating Station*
- 2.7.4. Salt River Project – Kyrene Generating Station*
- 2.7.5. Salt River Project – Santan Generating Station*

2.8 PDEQ Regulated Fossil Fuel Steam Generators

- 2.8.1. Tucson Electric Power Company – Irvington*

2.9 PCAQCD Regulated Fossil Fuel Steam Generators

- 2.9.1. Arizona Public Service Company – Saguaro*

3.0 CLARIFICATION OF PREVIOUSLY UNKNOWN, POTENTIALLY BART ELIGIBLE SOURCES

In addition to the sources identified in the previous section, several sources that were included in the October 18, 2005, update to Appendix H of the draft report identifying potentially BART-eligible sources in the WRAP region, were listed as “Do Not Know” under their BART eligibility. These sources have been reviewed, and it is recommended that their unknown status be changed as follows:

3.1 Forest Energy Corporation

This facility is listed under BART Category ID – BART-18 - Fuel Conversion Plant. This facility creates wood pellets that can be burned as fuel, and has obtained a Class II air quality permit from the Arizona Department of Environmental Quality. This permit is a non-Title V permit, and contains limitations that restrict the potential emissions of visibility impairing pollutants to less than 100 tons per year of each pollutant. It is recommended that this source be listed as a non-BART eligible facility.

3.2 Cyprus Casa Grande Corporation

This facility is listed under BART Category ID – BART 20 – Secondary Metal Production Facilities. It appears that this facility used to be a secondary copper smelter located around Casa Grande, Arizona. A search for this facility across the internet revealed that the Roaster\Leach\Acid plant for this facility was shut down in 1977, and that Cyprus Casa Grande Corporation was seeking an exemption from EPA from New Source Review/Prevention of Significant Deterioration (NSR/PSD) requirements in 1987. Memorandums from that time period indicate that EPA determined that the facility would trigger NSR/PSD requirements if these activities were restarted.

Arizona Revised Statute Title 49, Chapter 3, Article 1, Section 402(a)(2) reserves original jurisdiction over smelting of metal ores for the Arizona Department of Environmental Quality. There is no record of this facility having obtained a Title V permit from that Department, or from the Pinal County Air Quality Control District. It is recommended that this source be listed as a non-BART eligible facility.

3.3 Reynolds Metal Company

This facility is listed under BART Category ID – BART 20 – Secondary Metal Production Facilities. According to information found on the internet, Reynolds Metal Company and all of its assets were purchased by Alcoa Company in 2000. According to Alcoa’s Web site, it has two operations inside the State of Arizona. The first is a fabricated aluminum products facility located in Chandler, Arizona,

named Pimalco, Inc. The second is a “related [aluminum] products” facility located in Tucson, Arizona, named Huck International, Inc.

A review of Maricopa County Air Quality Department’s Web site revealed that no Title V application has been received, nor has a Title V permit been issued to Pimalco, Inc. A review of Pima County Department of Environmental Quality’s Web site revealed that no Title V permit has been issued to a company named Huck International, Inc. Because neither Department has issued a major source permit to either of these companies, it is unlikely that Pimalco, Inc. and Huck International, Inc. have the potential to emit visibility impairing pollutants at rates greater than 100 tons per year. It is recommended that this source be listed as a non-BART eligible facility.

3.4 ASARCO – Ray Mine

This facility is listed under BART Category ID- BART 22 – Fossil fuel-fired boilers with a heat input capacity greater than 250 MMBtu per hour. This facility has obtained Title V Permit number V20600.R02 from the Pinal County Air Quality Control District for the operation of a copper mine. A review of this permit revealed that there are no fossil fuel fired boilers that have a heat input capacity of greater than 250 MMBTU/hr authorized by the permit. The remaining equipment on-site can not be listed in one of the other 25 source categories. Based upon this review, it is recommended that this source be listed as a non-BART eligible facility.

3.5 Phelps Dodge Miami Smelter, Inc.

This facility is listed under BART category ID – BART 08 – Primary Copper Smelters. This facility has obtained Title V Permit number 1000046 from the Arizona Department of Environmental Quality. After reviewing this permit, it appears that this source meets the requirements of being listed as a BART eligible source. There appears to have been some recent modifications that may impact the application of BART to control SO₂, but it has the potential to emit more than 250 tons per year of other visibility impairing pollutants. Based upon the review of this permit, it is recommended that this source be identified as a BART eligible facility.

4.0 EMISSIONS UNIT BART ELIGIBILITY CRITERIA

In order to establish whether or not emissions units at a facility are truly BART-eligible, EPA published final regulatory text and guidelines for implementing BART on June 15, 2005. According to the language of the guidelines, there are three steps for determining which emissions units at a facility are considered to be BART-eligible. Those three steps are as follows:

- Step 1. Does the plant contain emissions units in one or more of the 26 source categories?
 - a. If no, then emissions units are not BART eligible.
 - b. If yes, proceed to Step 2.

- Step 2. Identify the start-up dates of emissions units identified in Step 1. Had the emissions unit begun operation after August 7, 1962 **and** in existence on August 7, 1977?
 - a. If no, then emissions units are not BART eligible.
 - b. If yes, proceed to Step 3.

- Step 3. Compare the potential emissions from all emissions units identified in Steps 1 and 2. Are the combined potential emissions of visibility impairing pollutants from these emissions units greater than 250 tons per year?
 - a. If no, then emissions units are not BART eligible.
 - b. If yes, then emissions units are BART eligible.

5.0 POTENTIALLY BART ELIGIBLE EMISSIONS UNITS RESEARCH

5.1 ADEQ Regulated Fossil Fuel Steam Generators

5.1.1. Arizona Electric Power Cooperative (Apache Station)

Source of Information – Title V Permit 1000109, 2004 Emissions Inventory

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Steam Units 1-3
(A.A.C. R18-2-401(2)(z) and 1601(2)(a))
No: Gas Turbines 1-3

Step 2: Are Emissions Units in Step 1 Date Eligible?

Steam Unit 1 – Constructed 1963 – Yes
Steam Unit 2 – Constructed 1976 – Yes
Steam Unit 3 – Constructed 1976 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Steam Unit 1	44.7	0.2	0.4
Steam Unit 2	4,236.2	1,525.1	18.1
Steam Unit 3	3,283.7	1,394.6	26.1
TOTAL	7,564.6	2,919.9	44.6

Yes for NOx and SOx for Steam Units 1, 2 and 3.

Notes: Stack information appears to be included in the permit documentation.

5.1.2. Arizona Public Service Company – Cholla

Source of Information – Title V Permit 33500

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Units 1-4 (A.A.C. R18-2-401(2)(z) and 1601(2)(a))
No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Unit 1 – Constructed in 1961 – Potentially
 Unit 2 – Constructed in 1974 – Yes
 Unit 3 – Constructed in 1975 – Yes
 Unit 4 – Constructed in 1978 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
Unit 1	1,612	713	47.0
Unit 2	3,305	951	131.6
Unit 3	3,297	8,928	135.9
TOTAL	8,214	10,592	314.5

Yes for NO_x, SO_x, PM₁₀ for Units 2 and 3.

Notes: Unit 1 is listed as potentially date eligible as information shows that the emissions unit was in service only 2 months prior to the cut-off date. Recommend requesting additional supporting documentation for final determination. Stack information appears to be included in the permit documentation.

5.1.3. *Arizona Public Service Company – Yucca*

Source of Information – Title V Permit 31876

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Steam Unit 1
 (A.A.C. R18-2-401(2)(z) and 1601(2)(a))
 No: Simple Cycle Turbines 1-4

Step 2: Are Emissions Units in Step 1 Date Eligible?

Steam Unit 1 – Constructed in 1959 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

No BART Eligible Emissions Units

5.1.4. *Salt River Project Company – Coronado Generating Station*

Source of Information – Title V Permit 1000106

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Unit 1-2
(A.A.C. R18-2-401(2)(z) and 1601(2)(a))
No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Unit 1 – Constructed in 1977 – Yes
Unit 2 – Constructed in 1977 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Unit 1	5,794.1	6,730.8	192.2
Unit 2	7,313.2	7,214.5	151.4
TOTAL	13,107.3	13,945.3	343.6

Yes for NOx, SOx, PM10 for Units 1 and 2.

5.2 ADEQ Regulated Portland Cement Manufacturers

5.2.1. Arizona Portland Cement Company

Source of Information – Title V Permit M190310P1-00

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Kilns 1-4
(A.A.C. R18-2-401(2)(c) and 1601(2)(d))
No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Kiln 1 – Constructed in 1949 – No
Kiln 2 – Constructed in 1951 – No
Kiln 3 – Constructed in 1955 – No
Kiln 4 – Constructed in 1972 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Kiln 4	2,126.7	< 5.0	~50.0

Yes for NO_x emissions from Kiln 4.

Notes: 1998 modification of Kiln 4 is the subject of a 2003 EPA NOV for failure to obtain a PSD permit prior to modification.

5.3 ADEQ Regulated Primary Copper Smelters

5.3.1. ASARCO – Hayden Smelter

Source of Information – Title V Permit 1000042

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Converters (5), Anode Furnace 1-3, Acid Plant
(A.A.C. R18-2-406(2)(g) and 1601(2)(h))
No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Converters 1-5: Constructed 1969 – Yes
Anode Furnaces 1-3: Constructed 1971 – Yes
Acid Plant – Constructed 1983 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
TOTAL	47.4	19,394.9	157.3

Yes for SO_x.

Notes: Acid plant may be considered control device for SO₂. If so, then BART eligibility may be impacted by installation of this control.

5.3.2. Phelps Dodge Miami Smelter

Source of Information – Title V Permit 1000046

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Hoboken Converters 1-5, Remelt Furnace, Acid Plant
(A.A.C. R18-2-406(2)(g) and 1601(2)(h))
No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Hoboken Converters 1-5 – Constructed 1974 – Yes
 Remelt Furnace – Constructed 1974 – Yes
 Acid Plant – Constructed 1974 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM10 (tpy)
TOTAL	219	8,754	340

Yes for SO_x and PM10, possible for NO_x.

Notes: Modifications to the Acid Plant may impact BART eligibility for SO₂ emissions.

5.4 ADEQ Regulated Nitric Acid Plants

5.4.1. Apache Nitrogen Products

Source of Information – Title V Permit 1000038

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: AOP-3, AOP-4
 (A.A.C. R18-2-401(2)(i), 1601(2)(j))
 No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

AOP-3 – Constructed 1971 – Yes
 AOP 4 – Constructed 1971 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM10 (tpy)
AOP-3	5.5	0	0
AOP-4	151.5	0	0
TOTAL	157	0	0

Please see notes.

Notes: Upon increasing the hours of operation for this facility to 8,760 hours for each operating unit, the estimated PTE for all of the emissions units at this facility was 240 tons per year for NOx. Based upon this it is recommended that a letter be sent to the source requesting confirmation of the facility's potential to emit.

5.5 ADEQ Regulated Lime Manufacturers

5.5.1. Chemical Lime Company – Douglas

Source of Information – Title V Permit 1000044

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Kiln 4-6
(A.A.C. R18-2-401(2)(k), 1601(2)(l))
No: Limestone Quarry

Step 2: Are Emissions Units in Step 1 Date Eligible?

Kiln 4 – Constructed 1967 – Yes
Kiln 5 – Constructed 1970 – Yes
Kiln 6 – Constructed 1979 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
TOTAL	51.3	125.5	116.5

Yes for NOx, SOx, and PM10 for Kilns 4 and 5. Please see Notes.

Notes: Stack information appears to have been included in the permit documentation. Kiln 5 was the only kiln to operate in 2004, and appears to have operated less than 1500 hours that year. Based upon the information in the 2004 Actual Emissions Inventory for these emissions units, it appears that they do have a Potential to Emit > 250 TPY for NOx, SOx, and PM10.

5.5.2. Chemical Lime Company – Nelson

Source of Information – Title V Permit 1000045

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Kiln 1-2

(A.A.C. R18-2-401(2)(k), 1601(2)(l))

No: Limestone Quarry

Step 2: Are Emissions Units in Step 1 Date Eligible?

Kiln 1 – Constructed 1973 – Yes

Kiln 2 – Constructed 1976 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Kiln 1	378.4	340.6	49.4
Kiln 2	602.6	507.4	1.3
TOTAL	981	848	~435.6

Yes for NOx, PM10 and SOx for Kilns 1 and 2.

Notes: According to the emissions inventory, ADEQ calculated actual emissions of 435.6 tons per year of PM10 emissions from the entire operation.

5.6 ADEQ Regulated Fossil Fuel Boilers > 250 MMBtu/hr Heat Input

5.6.1. Abitibi Consolidated Sales Corporation – Abitibi Consolidated Snowflake

Source(s) of Information – Title V Permit M170424P1-99, 2004 Emissions Inventory

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Power Boiler 1-3

(A.A.C. R18-2-401(2)(u), 1601(2)(v))

No: Balance of Paper Mill

Step 2: Are Emissions Units in Step 1 Date Eligible?

Power Boiler 1 – Constructed 1961 – No

Power Boiler 2 – Constructed 1975 – Yes

Power Boiler 3 – Constructed 2002 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Power Boiler 1	2,693.5	2,020.1	20.7

Yes for NOx and SOx for Power Boiler 1.

5.6.2. Phelps Dodge Morenci Mine

Source of Information – Title V Permit M110734P1-99

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Boilers 1-4, Gas Turbine 1-2, Gas Boilers 1-2
(A.A.C. R18-2-401(2)(u)&(z), 1601(2)(a)&(v))
No: Balance of Mining Operation

Step 2: Are Emissions Units in Step 1 Date Eligible?

Fossil Fuel Fired Boilers > 250 MMBtu/hr Heat Input

(A.A.C. R18-2-401(2)(u) & 1601(v))

Boiler 1 – Constructed 1941 – No

Boiler 2 – Constructed 1941 – No

Boiler 3 – Constructed 1943 – No

Boiler 4 – Constructed 1965 – Yes

Combined Cycle Power Plant

(A.A.C. R18-2-401(2)(z) & 1601(2)(a))

Gas Turbine 1 – Constructed 1970 – Yes

Gas Boiler 1 – Constructed 1970 – Yes

Gas Turbine 2 – Constructed 1970 – Yes

Gas Boiler 2 – Constructed 1970 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

It is likely for NOx, unlikely for SO₂, for Boiler 4, Gas Turbines 1 and 2, and Gas Boilers 1 and 2. Please, see notes.

Notes: The facility also has 5 small industrial boilers rated at 20.9 MMBtu/hr a piece, but all units are date ineligible. Facility is listed as likely to have a PTE > 250 TPY as 2004 actual emissions inventory showed no emissions from any of the BART eligible emissions units. Since they are active units on the permit, the one date eligible boiler is greater than 250 MMBtu/hr, the gas turbines are rated at 240 MMBtu/hr heat input, and the gas boilers are rated at 250 MMBtu/hr heat input, it is likely that these emissions units have a PTE > 250 TPY for NOx.

5.7 MCAQD Regulated Fossil Fuel Steam Generators

5.7.1. *Arizona Public Service Company – West Phoenix Power Plant*

Source of Information – Title V Permit V95-006

Step 1: Are Emissions Units Part of a Categorical Source?

- Yes: Combined Cycle Units 1-3
(County Rule 240 § 202, A.A.C. R18-2-1601(2)(a))
- No: Auxiliary Boiler, Simple Cycle Units 1-2

Step 2: Are Emissions Units in Step 1 Date Eligible?

- Combined Cycle Unit 1 – Constructed 1976 – Yes
- Combined Cycle Unit 2 – Constructed 1976 – Yes
- Combined Cycle Unit 3 – Constructed 1976 – Yes

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
TOTAL	1048	< 5	< 25

Yes for Combined Cycle Units 1-3 for NO_x. No for SO_x, and unlikely for PM₁₀.

Notes: Permit available on-line at <http://www.maricopa.gov/aq/permits/docs/V95-006.pdf>. Emissions represent actual emissions reported in the 2002 NEI, online: ftp://ftp.epa.gov/EmisInventory/2002finalnei/point_sector_data/.

5.7.2. *Arizona Public Service Company – Ocotillo Power Plant*

Step 1: Are Emissions Units Part of a Categorical Source?

- Yes: Steam Unit 1-2
(County Rule 240 § 202, A.A.C. R18-2-1601(2)(v))
- No: Turbine Units 1-2

Step 2: Are Emissions Units in Step 1 Date Eligible?

- Steam Unit 1 – Constructed 1960 – No
- Steam Unit 2 – Constructed 1960 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

No BART Eligible Emissions Units

Notes: Permit available on-line at <http://www.maricopa.gov/aq/permits/docs/V95-007.pdf>.

5.7.3. *Salt River Project – Agua Fria Generating Station*

Source of Information – www.srpnet.com/about/stations/aguafria.aspx

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Steam Units 1-3
(County Rule 240 § 202, A.A.C. R18-2-1601(2)(v))
No: Turbine Units 4-6

Step 2: Are Emissions Units in Step 1 Date Eligible?

Steam Unit 1 – Constructed 1958 – No
Steam Unit 2 – Constructed 1957 – No
Steam Unit 3 – Constructed 1961 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

No BART Eligible Emissions Units

Notes: Dates of construction/operation obtained from the company, so permit review was rendered unnecessary.

5.7.4. *Salt River Project – Kyrene Generating Station*

Source of Information – Title V Significant Permit Revision S00-016, <http://yosemite.epa.gov/R9/air/EPSS.NSF/6924c72e5ea10d5e882561b100685e04/ef0ffb73637a78cf88256a0d00802a10!OpenDocument>

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Boiler Units K1, K2
(County Rule 240 § 202, A.A.C. R18-2-1601(2)(v))
No: Turbine Units K4, K5, K6

Step 2: Are Emissions Units in Step 1 Date Eligible?

Boiler Unit K1 – Constructed 1952 – No
Boiler Unit K2 – Constructed 1954 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

No BART Eligible Emissions Units

Notes: Permit available on-line through EPA Region IX's Electronic Permit Submittal System (EPSS)

5.7.5. *Salt River Project – Santan Generating Station*

Source of Information – Title V Permit V95-008

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Unit 1-6 (County Rule 240 § 202, A.A.C. R18-2-1601(2)(v))

No: N/A

Step 2: Are Emissions Units in Step 1 Date Eligible?

Unit 1 – Constructed 1973-1974 – Yes

Unit 2 – Constructed 1973-1974 – Yes

Unit 3 – Constructed 1973-1974 – Yes

Unit 4 – Constructed 1974-1975 – Yes

Unit 5 – Constructed 2005 – No

Unit 6 – Constructed 2006 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
TOTAL	333	< 5	< 10

Notes: Permit available on-line at <http://www.maricopa.gov/aq/permits/docs/V95-008.pdf>. Emissions represent actual emissions reported in the 2002 NEI, online: ftp://ftp.epa.gov/EmisInventory/2002finalnei/point_sector_data/.

5.8 PDEQ Regulated Fossil Fuel Steam Generators

5.8.1. *Tucson Electric Power Company – Irvington*

Source of Information – Title V Permit 1000102

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Steam Units I1 – I4, Auxiliary Boiler
(A.A.C. R18-2-401(2)(z) and 1601(2)(a))

No: Simple Cycle Turbine Units IGT1-IGT4

Step 2: Are Emissions Units in Step 1 Date Eligible?

Steam Unit I1 – Constructed 1957 – No
 Steam Unit I2 – Constructed 1959 – No
 Steam Unit I3 – Constructed 1961 – Potentially
 Steam Unit I4 – Constructed 1964 – Potentially
 Auxiliary Boiler – Constructed 1972 – Potentially

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

2004 Actual Emissions Inventory Information:

Unit	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
TOTAL	2540	3118	> 150

Potentially NO_x, SO_x, and PM₁₀ for Steam Unit I4 (pending discussion in the notes).

Notes: Steam Units I3 and I4 are listed as potentially eligible for two different reasons. Steam Unit I3 has been observed to have an “in-service” date 3 months prior to the eligibility cut off. Recommend requesting additional information prior to final determination. Steam Unit I4 was modified to burn coal in 1981. The modification was exempt by law from PSD. Recommend requesting additional documentation prior to final determination. Emissions represent actual emissions reported in the 2002 NEI, online: ftp://ftp.epa.gov/EmisInventory/2002finalnei/point_sector_data/.

5.9 PCAQCD Regulated Fossil Fuel Steam Generators

5.9.1. Arizona Public Service Company – Saguario

Source of Information – Title V Permit V20601.R02

Step 1: Are Emissions Units Part of a Categorical Source?

Yes: Steam Unit 1-2
 (A.A.C. R18-2-401(2)(z) and 1601(2)(a))
 No: Simple Cycle Gas Turbine Unit 1-2, GE 7EA Turbine

Step 2: Are Emissions Units in Step 1 Date Eligible?

Steam Unit 1 – Constructed 1953 – No
 Steam Unit 2 – Constructed 1954 – No

Step 3: Σ Potential to Emit > 250 TPY of Visibility Impairing Pollutants?

No BART Eligible Emissions Units

6.0 PRELIMINARY RECOMMENDATION OF BART ELIGIBLE EMISSIONS UNITS IN ARIZONA

Arizona Department of Environmental Quality Sources	
Fossil Fuel Fired Steam Generators A.A.C. R18-2-406(2)(z), 1601(2)(a)/BART-01	Major Emissions Units
Arizona Electric Power Cooperative	Steam Unit 1, Steam Unit 2 and Steam Unit 3
Arizona Public Service Company - Cholla	Unit 2 and Unit 3
Arizona Public Service Company – Yucca	No BART Eligible Emissions Units
Salt River Project – Coronado Generating Station	Unit 1 and Unit 2
Portland Cement Manufacturers A.A.C. R18-2-406(2)(c), 1601(2)(d)/BART-04	Major Emissions Units
Arizona Portland Cement Company	Kiln 4
Primary Copper Smelters A.A.C. R18-2-406(2)(g), 1601(h)/BART-08	Major Emissions Units
ASARCO – Hayden Smelter	Converter 1 through 5, Anode Furnace 1 through 3
Phelps Dodge – Miami Smelter	Hoboken Converters 2 through 5, Re-melt Furnace, Shaft Furnace
Nitric Acid Plants A.A.C. R18-2-406(2)(i), 1601(2)(j)/BART-10	Major Emissions Units
Apache Nitrogen Products Inc.	AOP-3, AOP-4
Lime Plants A.A.C. R18-2-406(2)(k), 1601(2)(l)/BART-12	Major Emissions Units
Chemical Lime Company – Douglas	Kiln 4, Kiln 5
Chemical Lime Company – Nelson	Kiln 1, Kiln 2
Fossil Fuel Fired Boilers A.A.C. R18-2-406(2)(u), 1601(2)(v)/BART-22	Major Emissions Units
Abitibi Consolidated Sale Corporation – Abitibi Consolidated Snowflake	Power Boiler 2
Phelps Dodge Corporation – Morenci	Boiler 4, Gas Turbine 1, Gas Boiler 1, Gas Boiler 2, Gas Turbine 2

Maricopa County Air Quality Department	
Fossil Fuel Fired Steam Generators A.A.C. R18-2-1601(2)(a)/BART-01	Major Emissions Units
Arizona Public Service Company - West Phoenix Power Plant	Combined Cycle Unit 1, Combined Cycle Unit 2, Combined Cycle Unit 3
Arizona Public Service Company – Ocotillo Power Plant	No BART Eligible Emissions Units
Salt River Project – Agua Fria	No BART Eligible Emissions Units
Salt River Project – Kyrene	No BART Eligible Emissions Units
Salt River Project – San Tan	Unit 1, Unit 2, Unit 3 and Unit 4

Pima County Department of Environmental Quality	
Fossil Fuel Fired Steam Generators A.A.C. R18-2-1601(2)(a)/BART-01	Major Emissions Units
Tucson Electric Power Company – Irvington	Steam Unit I4

Pinal County Air Quality Control District	
Fossil Fuel Fired Steam Generators A.A.C. R18-2-1601(2)(a)/BART-01	Major Emissions Units
Arizona Public Service Company – Saguaro	No BART Eligible Emissions Units