



Douglas A. Ducey  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

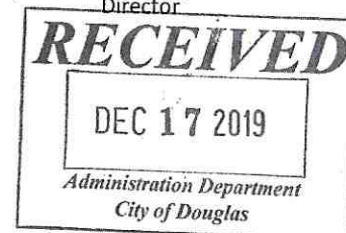


Misael Cabrera  
Director

## US MAIL

December 9, 2019

City of Douglas  
City Clerks' Office  
425 10th Street  
Douglas, AZ 85607



Subject: Air Quality Control Permit No. 78417 for Arizona Public Service  
Fairview Generating Station - Place ID: 2531

Enclosed are the following documents to be posted for public review:

- A copy of the public notice
- A copy of the permit application with supporting documents
- A copy of the draft permit with supporting documents and applicable rules

Please keep this material where it will be available for viewing by the general public. The referenced material may be discarded after January 17, 2020.

If you have any questions, please contact me at (602) 771-2338.

Sincerely,

Sylvia Nelson  
Administrative Assistant III  
Air Permits Unit

## **PUBLIC NOTICE** **YOU HAVE A VOICE IN AIR POLLUTION CONTROL IN ARIZONA**

The Arizona Department of Environmental Quality (ADEQ) proposes to issue Air Quality Control Renewal Permit Number 78417 to Arizona Public Service Company for the continued operation of the Fairview Generating Station located one mile north of Highway 80 on Sulphur Springs Road in Douglas, Cochise County, Arizona 85607. The mailing address for the facility is 400 North 5th Street, MS 9303, Phoenix, Arizona 85004. The facility is subject to the requirements of the Federal Clean Air Act, Code of Federal Regulations, Arizona Revised Statute 49-426, and the Arizona Administrative Code, Title 18, Chapter 2. The facility emits the following air contaminants: particulate matter with diameter less than 10 micron (PM10), particulate matter with diameter less than 2.5 micron (PM2.5), volatile organic compounds, nitrogen oxides, sulfur dioxide, carbon monoxide, lead, and hazardous air pollutants.

This public notice provides information to help you participate in the decision-making process. You have an opportunity to submit written comments on this permit and request that ADEQ hold a public hearing on the permit. The written comment shall include the name, mailing address, signature of commenter and/or their agent or attorney and shall clearly set forth reasons why the permit should or should not be issued. Grounds for comment are limited to whether the permit meets the criteria for issuance spelled out in the state air pollution control laws or rules. The public notice period is in effect from December 12, 2019 to January 10, 2020. Comments may be submitted in writing to: Balaji Vaidyanathan, Facilities Emissions Control Section, ADEQ, 1110 West Washington Street, 3415A-1, Phoenix, AZ 85007 or via e-mail [airpermits@azdeq.gov](mailto:airpermits@azdeq.gov). Comments must be received by January 10, 2020.

The draft permit and related documentation are available for review Monday through Friday between 8:30 a.m. and 4:30 p.m., at the ADEQ Records Center, at 1110 West Washington Street, Phoenix, Arizona. Please call (602) 771-4380 or email [recordscenter@azdeq.gov](mailto:recordscenter@azdeq.gov) 48 hours in advance to schedule an appointment to review the file. The documents are also available at City of Douglas, City Clerks' Office at 425 10th Street in Douglas, AZ 85607. The draft permit and technical support document may be viewed online at [www.azdeq.gov](http://www.azdeq.gov) by accessing the Public Notices at the bottom of the webpage and searching for the date of this public notice.

ADEQ will consider all comments received in making a final decision on the proposed permit. Everyone commenting will receive notification of the final decision. People who file comments on the permit will have the right to appeal the final decision as an appealable agency action to the Office of Administrative Hearing (OAH) pursuant to §41.1092.03, and the appeal must be filed within thirty (30) days after the issuance of the final decision. The OAH may sustain, modify, or reverse the final decision.

ADEQ will take reasonable measures to provide access to department services to individuals with limited ability to speak, write or understand English and/or to those with disabilities. Requests for language interpretation, ASL interpretation, CART captioning services or disability accommodations must be made at least 48 hours in advance by contacting Ian Bingham, Title VI Nondiscrimination Coordinator at 602-771-4322 or [bingham.ian@azdeq.gov](mailto:bingham.ian@azdeq.gov). Teleprinter services are available by calling 7-1-1 at least 48 hours in advance to make necessary arrangements.

ADEQ tomará las medidas razonables para proveer acceso a los servicios del departamento a personas con capacidad limitada para hablar, escribir o entender inglés y / o para personas con discapacidades. Las solicitudes de servicios de interpretación de idiomas, interpretación ASL, subtítulos de CART, o adaptaciones por discapacidad deben realizarse con al menos 48 horas de anticipación contactando a Ian Bingham, Coordinador de Anti-Discriminación del Título VI al 602-771-4322 o [bingham.ian@azdeq.gov](mailto:bingham.ian@azdeq.gov). Los servicios de teleimpresores están disponibles llamando al 7-1-1 con al menos 48 horas de anticipación para hacer los arreglos necesarios.



# **MINIMUM SIGN SIZE REQUIREMENTS**

## **for ADEQ**

# **AIR QUALITY CONTROL PERMIT APPLICATION**

Written Comment Period  
Ends January 10, 2020  
Proposed Permit No.: 78417

(Public  
Notice  
Copy  
Goes  
Here)

**For more information contact:**

**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (A.D.E.Q.)**  
**(800) 234-5677**

### **MINIMUM REQUIREMENTS:**

1. Sign shall be 3-feet wide by 4-feet high.
2. Bottom of sign shall be 18 inches above the ground.
3. Sign shall be supported by two anchor posts.
4. Sign shall be posted on the affected property in such a manner as to be legible from the public right of-way.
5. Sign shall be black letters on a white background.
6. Sign shall be made of 1/4-inch plywood.

CTS' 392207



ADEQ  
AIR QUALITY DIVISION

19 SEP -9 AM 11:48

September 03, 2019

**Hand Delivered &  
Certified Mail - Return Receipt Requested**

Mr. Daniel Czecholinski  
Acting Air Quality Director  
ADEQ - Air Quality Department  
1110 West Washington Street  
Phoenix, AZ 85007

Lat - 31°21'49"N, Long-109°33'7.5", Elv-1000ft

**Re: Permit Renewal Application for Title V Permit #49216 - Fairview Generating Station**

Mr. Czecholinski,

This document is being submitted pursuant to Arizona Administrative Code R18-2-304, and constitutes a renewal application by Arizona Public Service (APS) for the Fairview Generating Station's Title V Air Quality Operating Permit (49216).

If you require additional information or have any questions, please contact Marina Estrella at (602) 250-3795.

Based on information and belief formed after reasonable inquiry, the statement and information in the permit application are true, accurate and complete.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Worthington", is written over a horizontal line.

Steve Worthington  
Plant Manager  
Saguaro Power Plant  
Arizona Public Service Company

cc: US EPA, Region IX  
Air Permits Office  
75 Hawthorne St  
San Francisco, CA 94105



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## Section 2.2 – Emission Sources

Description	Exhaust stack for Combustion Turbine
Exit Gas Temperature (°F)	885
Exit Gas Velocity	47.7
Height (ft)	32.2
Inside Dimensions (ft)	12.5 x 10.5

POLLUTANT	Frame 5 Combustion Turbine					
	Emission Factor	Source	Heat Input	Operating Hours	POTENTIAL TO EMIT	
	lb/mmBtu		mmBtu/hr	hr/yr	lb/hr	tons/yr
CO	4.0E-03	Source Test <sup>1</sup>	296	8,760	1.18	5.2
NO <sub>x</sub>	6.1E-01	Source Test <sup>1</sup>	296	8,760	181.40	794.5
PM	1.2E-02	AP-42	296	8,760	3.55	15.6
PM <sub>10</sub>	1.2E-02	AP-42	296	8,760	3.55	15.6
PM <sub>2.5</sub>	1.2E-02	AP-42	296	8,760	3.55	15.6
SO <sub>2</sub>	5.4E-02	Calculated <sup>2</sup>	296	8,760	15.86	69.5
VOC	4.1E-04	AP-42	296	8,760	0.12	0.5
CO <sub>2</sub>	1.6E+02	AP-42	296	8,760	46,459.44	203,492.3
1,3-Butadiene	1.6E-05	AP-42	296	8,760	0.00	0.0
Benzene	5.5E-05	AP-42	296	8,760	0.02	0.1
Formaldehyde	2.8E-04	AP-42	296	8,760	0.08	0.4
Naphthalene	3.5E-05	AP-42	296	8,760	0.01	0.0
PAH	4.0E-05	AP-42	296	8,760	0.01	0.1
Arsenic	1.1E-05	AP-43	296	8,760	0.00	0.0
Beryllium	3.1E-07	AP-44	296	8,760	0.00	0.0
Cadmium	4.8E-06	AP-45	296	8,760	0.00	0.0
Chromium	1.1E-05	AP-46	296	8,760	0.00	0.0
Lead	1.4E-05	AP-47	296	8,760	0.00	0.0
Manganese	7.9E-04	AP-48	296	8,760	0.23	1.0
Mercury	1.2E-06	AP-49	296	8,760	0.00	0.0
Nickel	4.6E-06	AP-50	296	8,760	0.00	0.0
Selenium	2.5E-05	AP-51	296	8,760	0.01	0.0
<sup>1</sup> APS conducted a source test of the Fairview CT on 6/8/2001. The CO and NO <sub>x</sub> emission factors listed were approved by ADEQ.						
<sup>2</sup> SO <sub>2</sub> emission factor is calculated based on sulfur weight percent, density and heat content.						
lb/hr = Emission Factor (lb/mmBtu) x Heat Input (mmBtu/hr)						
tons/yr = lb/hr x Operating Hours (hr/yr)						

POLLUTANT	Detroit Starting Diesel Engine					
	Emission Factor	Source	Heat Input (mmBtu)	Operating Hours <sup>1</sup>	POTENTIAL TO EMIT	
	lb/mmBtu			hour/yr	lb/hr	tons/yr
CO	9.50E-01	AP-42	8	30.4	7.60	0.12
NO <sub>x</sub>	4.41E+00	AP-42	8	30.4	35.28	0.54
PM	3.10E-01	AP-42	8	30.4	2.48	0.04

## Section 2.3- Equipment List

Equipment List					
Equipment ID	Description	Size	Serial Number	Make/ Model	Manufacture/ Installation Date
Combustion Turbine	Simple cycle combustion turbine	20.95 MW	214472	General Electric/ Company Frame 5	03/31/1972
Starting Diesel Engine	Diesel starting engine (ZZZZ)	500 hp	12VA026309	Detroit/ Diesel N 71237000	03/31/1972
Diesel Fuel Oil Storage Tank 1	Diesel fuel storage tank	20,000 barrels	N/A	N/A	03/31/1972
Emergency Engine w/fuel tank	Diesel emergency engine (III)	157 hp	CAT00C44LLC500135	Caterpillar/ C4.4 DIT	05/08/2014

## Section 2.4- Permit Application Form

### 1. Description of the process to be carried out in each unit

The Fairview Generating Station is located in Douglas, Arizona, and is owned and operated by the Arizona Public Service Company (APS).

The Fairview Generating Station was built to meet the energy demands of the city of Douglas in case the main electrical supply is completely interrupted. The design base load capacity is 20.95 MW on #2 diesel and 21.4MW on natural gas. This unit is a simple cycle combustion turbine (SCC # 2-01-001-01) and placed into commercial operation on May 31, 1972. The unit consists of a General Electric Company Frame 5 gas turbine (17 stages axial flow compressor, 2-stage power turbine) and an electrical generator (air-cooled 23,000 kva, 13,200 stator volts, 3,600 rpm).

Although the Fairview Generating Station was designed to fire natural gas as well as #2 diesel, at the present time there is not a natural gas supply line to the plant, so the only source of fuel is #2 diesel. Fuel oil is delivered to the plant by trucks and held in a storage tank with a total capacity of 20,000 barrels.

Currently, the Fairview Generating Station has no on-site operating staff. Control systems that allow for remote operating are schedule to upgraded in the 4<sup>th</sup> quarter of 2014. This project involves the addition of a 157hp emergency diesel engine. The addition of the engine is covered in a separate minor modification application submitted at the same time as this renewal application. This renewal reflects the addition of the engine in both the equipment list and emission calculations.

### 2. Description of Products

The sole product of the Fairview Generating Station is electrical power.

### 3. Description of Alternate Scenarios and Products

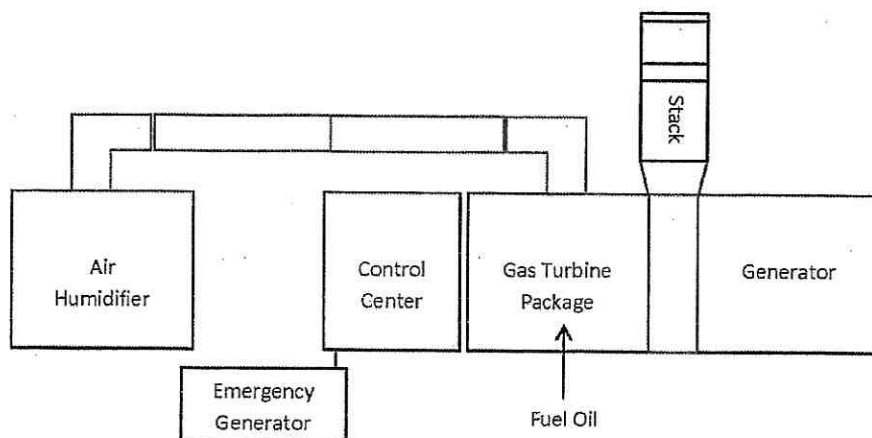
Because fuel oil is currently the only available fuel supply, the standard operating scenario for this source is to burn #2 diesel at a capacity of 0-100%, and there are no alternate operating scenario(s).

### 4. Description of alternate operating scenario product(s)

There is no alternate product of the Fairview Generating Station.



## 5. Flow Diagram(s)



## 6. Material Balances for All Processes

No new material balances were used in estimating raw material usage or air emissions from the Fairview Generating Station.

## 7. Emission Related Information

POLLUTANT	TOTAL POTENTIAL TO EMIT	
	lb/hr	tons/yr
CO	9.08	5.37
NO <sub>x</sub>	217.64	795.30
PM	6.09	15.60
PM <sub>10</sub>	6.09	15.60
PM <sub>2.5</sub>	6.09	15.60
SO <sub>2</sub>	18.27	69.53
VOC	0.12	0.53
CO <sub>2</sub>	588693.66	215712.02
1,3-Butadiene	0.01	0.02
Benzene	0.17	0.11
Formaldehyde	0.28	0.41
Naphthalene	0.01	0.05
PAH	0.04	0.06
Arsenic	0.00	0.01
Beryllium	0.00	0.00
Cadmium	0.00	0.01
Chromium	0.00	0.01
Lead	0.00	0.02

Manganese	0.23	1.02
Mercury	0.00	0.00
Nickel	0.00	0.01
Selenium	0.01	0.03
Acetaldehyde	0.13	0.03
Acrolein	0.02	0.00
Propylene	0.42	0.10
Toluene	0.07	0.02
Xylene	0.04	0.01

## 8. Applicable Requirements

### ARIZONA ADMINISTRATIVE CODE TITLE 18

#### ARTICLE 3. PERMITS AND PERMIT REVISIONS

- R18-2-302 Applicability; Classes of Permits
  - A. Requirement to obtain permit or permit revision
  - B.1 Class I permits
- R18-2-304 Permit Application Processing Procedures (except R18-2-304.I)
- R18-2-306 Permit Contents
- R18-2-306.01 Voluntarily Accepted Emission Limitations and Standards
  - \*See Source Specific Applicable Requirements Chart below
- R18-2-309 Compliance Plan; Certification
- R18-2-310 Affirmative Defense for Excess Emissions Due to Malfunction, Startup, and Shutdown
- R18-2-310.01 Reporting Requirements
- R18-2-311 Test Methods and Procedures
  - A. Applicable test methods and procedures
  - B. Determine opacity using Reference Method 9 of the Arizona Testing Manual
- R18-2-312 Performance Tests
- R18-2-315 Posting of Permit
- R18-2-317 Facility Changes Allowed Without Permit Revisions
  - D. Notification to director and administrator
  - E. Content of notification
- R18-2-318 Administrative Permit Amendments (except R18-2-318.C and D)
- R18-2-319 Minor Permit Revisions (except R18-2-320.E)
- R18-2-320 Significant Permit Revisions
- R18-2-321 Permit Reopenings, Revocation and Reissuances; Termination
  - B. Response to notice that cause exists to reopen a Class I permit



- R18-2-322 Permit Renewal and Expiration
  - A. Procedural requirements
  - B. Timely application and required testing

R18-2-325 Permit Shields

R18-2-326 Fees Related to Individual Permit

R18-2-327 Annual Emission Inventory Questionnaire (except R18-2-327.F)

- R18-2-330 Public Participation
  - F. Posting public notice at the source

#### ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

- R18-2-604 Open Areas, Dry Washes, or Riverbeds
  - B. Particulate matter limits from open areas

R18-2-605 Roadways and Streets

R18-2-606 Material Handling

R18-2-607 Storage Piles

R18-2-614 Evaluation of Nonpoint Source Emissions

#### ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

- R18-2-702 General Provisions
  - B. Opacity standards

R18-2-719 Standards of Performance for Existing Stationary Rotating Machinery

R18-2-726 Standards of Performance for Sandblasting Operations

R18-2-727 Standards of Performance for Spray Painting Operations

- R18-2-730 Standards of Performance for Unclassified Sources
  - D. Restriction of emissions of gaseous or odorous materials
  - F. Handling and storage of VOCs
  - G. Stack requirements

#### ARTICLE 8. EMISSIONS FROM MOBILE SOURCE (NEW AND EXISTING)

R18-2-801 Classification of Mobile Sources

R18-2-802 Off-road Machinery

R18-2-804 Roadway and Site Cleaning Machinery

#### ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS

R18-2-1101.A(8) Subpart M – Asbestos

#### FEDERAL REQUIREMENTS

- 40 CFR Part 60 STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES  
 Subpart III Standards of Performance for Stationary Compression Ignition Internal Combustion Engines  
 \*This will become a regulatory requirement when the addition of the new emergency engine occurs
- 40 CFR Part 61 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS  
 Subpart M National Emission Standards for Asbestos
- 40 CFR Part 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES  
 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 40 CFR Part 82 STRATOSPHERIC OZONE PROTECTION, RECYCLING AND EMISSION REDUCTION  
 Subpart F Recycling and Emission Reduction

## 9. Proposed Exemptions

No exemptions from applicable requirements are proposed for the Fairview Generating Station.

## 10. Process Information

This section provides information for the Fairview Generating Station not contained elsewhere in this permit renewal application.

### MAXIMUM PROCESS RATES

#### GENERATION

20.95mw/hr (diesel combustion)  
 183,522 mw/yr (8,760 hr/yr)

#### FUEL USAGE

2,220 gal/hr (diesel combustion)  
 19,447,200 gal/yr (8,760 hr/yr)

#### HEAT INPUT

295.92 mmBtu/hr (diesel combustion)  
 2,592,259.2 mmBtu/yr (8,760 hr/yr)

### ANTICIPATED OPERATING SCHEDULES:

The Fairview combustion turbine operates on as-demanded schedule. Accordingly, operation of the unit during any time of the year, day of the week, or hours during the day is considered normal for this unit.

## 11. Process and Control Equipment

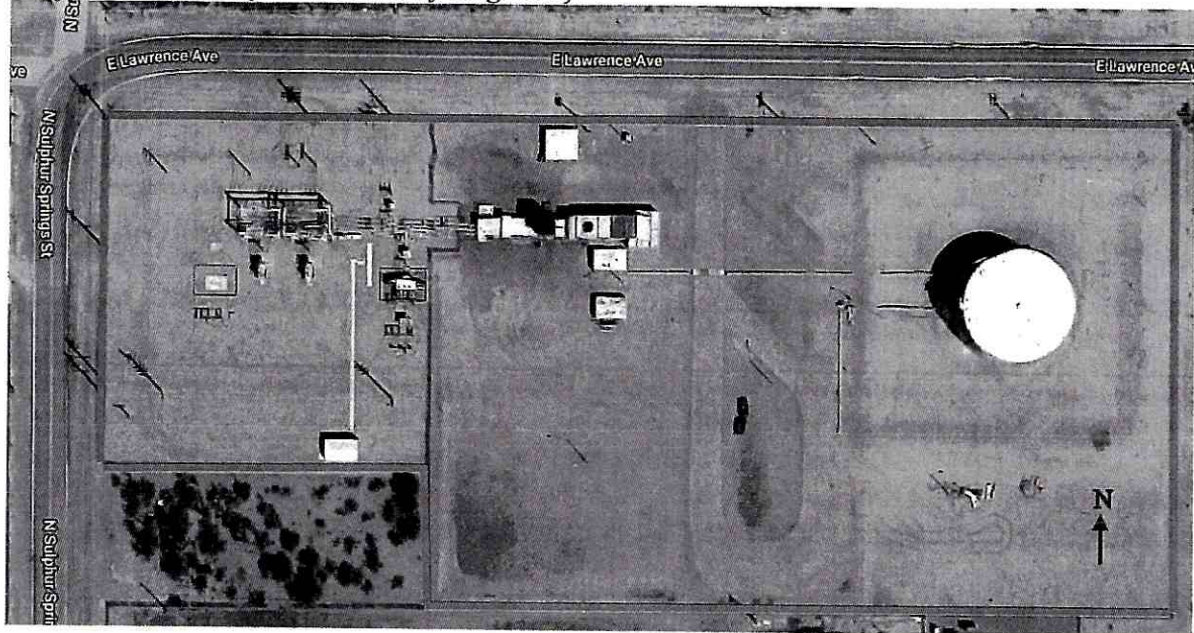
All process equipment for the Fairview Generating Station is described in Sections 2, 5 and 14 of this application.

## 12. Stack Information

Description	Exhaust stack for Combustion Turbine
Exit Gas Temperature (°F)	885
Exit Gas Velocity	47.7
Height (ft)	32.2
Inside Dimensions (ft)	12.5 x 10.5



### 13. Site Diagram (Site boundary in green)



### 14. Air Pollution Control Information

The Fairview Generating Station has no air pollution control equipment other than the inherent design of the process equipment. Air emissions are minimized through good operational and maintenance practices.

### 15. Supplementary Equipment Information

All process equipment for the Fairview Generating Station is described in Section 2, 7, 10, and 14 of this application.

## 16. Compliance Plan

Permit Term or Condition		Method or Means Used for Determining Compliance	Compliance Status (Continuous or Intermittent)	Deviation
<b>Attachment "A", General Provisions</b>				
Section A.I.	Permit is valid for a period of five years from the date of issuance. Submit an application for renewal of the permit at least 6 months, but no more than 18 months prior to the date of permit expiration.	N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.II.A	Comply with all conditions contained in Attachments "A" through "C" of this permit including all applicable requirements of Arizona air quality statutes and rules, and Clean Air Act.	See individual permit conditions.	See individual permit conditions	No
Section A.II.B	Need to halt or reduce activity not a defense.	N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.III	Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause	N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.IV	Posting of Permit	Standard operating procedure; compliance review.	Continuous	No
Section A. V	Fee Payment	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.VI	Annual Emission Inventory (EI) Questionnaire	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.VII	Compliance Certification	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.VIII	Certification of Truth, Accuracy, and Completeness	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.IX	Inspection and Entry	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.X	Permit Revision Pursuant to Federal Hazardous Air Pollutant Standard	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section A.XI	Accidental Release Program	Standard operating procedure; CAA 112(r) Program Compliance Files	N/A	N/A
Section A.XII.A	Excess Emissions Reporting	Standard operating procedure; compliance review.	Continuous	No
Section A.XII.B	Permit Deviations Reporting	Standard operating procedure; reporting; recordkeeping; compliance review.	Continuous	No



Section A.XII.C	Emergency Provisions		Standard operating procedure; compliance review.	Continuous	No
Section A.XII.D	Compliance schedule for any excess emission or permit deviations that cannot be corrected within 72 hours		Standard operating procedure; compliance review.	Continuous	No
Section A.XII.E	Affirmative Defense for Excess Emissions Due to Malfunctions, Startup, and Shutdown		N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.XIII	Recordkeeping Requirements		Standard operating procedure; records retention policy; compliance review.	Continuous	No
Section A.XIV	Submit the following reports: Compliance Certifications, Reports of Excess Emissions, Permit Deviations and Emergencies, Other Reports required by Attachment B		See individual permit conditions	See individual permit conditions	No
Section A.XV	Duty to Provide Information				
Section A.XVI	Permit Amendment or Revision		Standard operating procedure; reporting; recordkeeping; compliance review.	Continuous	No
Section A.XVII	Permit Change Without Permit Revision		Standard operating procedure; reporting; recordkeeping; compliance review.	Continuous	No
Section A.XVIII	Performance Testing Requirements		Standard operating procedure; reporting; recordkeeping; compliance review.	Continuous	No
Section A.XIX	Property Rights		N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.XX	Severability Clause		N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.XXI	Permit Shield		N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section A.XXII	Protection of Stratospheric Ozone		Standard operating procedure; reporting; recordkeeping; compliance review.	Continuous	No
<b>Attachment "B", Specific Conditions – Section 1. Facility Wide Requirements</b>					
Section B.I.A.1	At all times, the Permittee shall have, on site or on-call, a person that is certified in EPA Reference Method 9.		Method 9 observations; recordkeeping; compliance review.	Continuous	No
Section B.I.A.2	All equipment identified in Attachment "C" shall be operated and maintained in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available or not applicable, the Permittee shall		Recordkeeping; compliance review.	Continuous	No



	opacity of the emissions observed appears to exceed the standard, then the observer shall conduct a certified EPA Reference Method 9 observation. If the generator is not in operation at the time of the survey, the Permittee does not have to set the generator in operation to conduct the survey. Instead the Permittee shall document that the generator was not in operation. The Permittee shall keep records of the name of observer, date and time of observation, and results of the observation.			
Section B.II.B.3	Permit Shield	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.II.C	Within 90 days after the 12-month rolling total hours of operation in Condition 11.A.2 exceed 1,103 hours, the Permittee shall conduct or cause to be conducted a performance test for nitrogen oxides on the simple cycle combustion engine. Performance testing for nitrogen oxides shall be conducted in accordance with EPA Referenced Method 7E described in 40 CFR 60, Appendix A.	Standard operating procedure; performance testing; recordkeeping; compliance review	Continuous	No
Section B.II.D.I	The Permittee shall not emit or cause to be emitted into the atmosphere any gases containing sulfur dioxide in excess of 1.0 pound per million Btu heat input.	Calculations demonstrating compliance; recordkeeping	Continuous	No
Section B.II.D.2.a-b	While the facility is in operation, the Permittee shall record daily the sulfur content of the fuel (sulfur weight percent) being fired in the simple cycle combustion turbine and the starting engine. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the simple cycle combustion turbine or the starting engine exceeds 0.05 percent.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.II.D.2.c	The Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include: (1) The sulfur content of the #2 diesel fuel (sulfur weight percent); (2) The method used to determine the sulfur content of #2 diesel fuel.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.II.D.3	Compliance with the condition of this part shall be deemed compliance with A.A.C.R18-2-719.H, 719.F, 719.I, 719.J, and 719.K.1.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.II.E.1	The Permittee shall comply with the terms of the section no later than May 3, 2013	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.II.E.2	The Permittee shall operate and maintain the starting diesel engine according to the manufacture's emission-	Standard operating procedure; recordkeeping; compliance review	Continuous	No

	prepare an Operation and Maintenance plan, which provides adequate information to properly operate and maintain the equipment. In the absence of vendor-supplied operations and maintenance instructions, the Permittee shall operate the equipment in accordance with the Operation and Maintenance Plan.			
Section B.I.B.1	The Permittee shall maintain, on-site, records of the manufacture's specifications or Operations and Maintenance Plan for minimizing emissions for all process and control equipment listed in Attachment "C".	Recordkeeping; compliance review.	Continuous	No
Section B.I.B.2	The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII of the Attachment "A." All instances of deviations from the requirements of the Permit shall be clearly identified in the reports.	Recordkeeping; reporting; compliance review.	Continuous	No
<b>Attachment "B", Specific Conditions – Section II, Simple Cycle Combustion Turbines and Starting Diesel Engine</b>				
Section B.II.A.1	The Permittee shall only combust #2 diesel fuel with sulfur content less than or equal to 0.05 percent in the simple cycle combustion turbine and the starting engine.	Standard operating procedure; compliance review.	Continuous	No
Section B.II.B.1.a	Monitoring and Recordkeeping Requirements: For testing purposes, the Permittee shall maintain a 12-month rolling total of the hours that the simple cycle combustion turbine is operational.	Calculations demonstrating compliance; recordkeeping	Continuous	No
Section B.II.B.1.b	For the purposes of this condition, "heat input" is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.	N/A. Explanatory statement of law and therefore not amenable to compliance certification.	N/A	N/A
Section B.II.B.1.c	The Permittee shall not emit or cause to be emitted into the atmosphere gases exhibiting opacity greater than 40 percent for any period greater than 10 consecutive seconds. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.	Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.II.B.2.a	While the equipment at the facility operates, the Permittee shall record the lower heating value of the fuel being fired in the simple cycle combustion turbine and the starting engine.	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section B.II.B.2.b	A certified EPA Reference Method 9 observer shall conduct a survey of visible emissions emanating from the stack of cycle combustion turbine and the starting engine while operating at normal representative working conditions. A minimum of one visual survey of visible emissions shall be conducted for each 80 hours of operation of the simple cycle combustion engine. If the	Method 9 observations; standard operating procedure; recordkeeping; compliance review	Continuous	No



	related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.			
Section B.II.E.3	The Permittee shall change the oil and filter every 500 hours or operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, and oil analysis program described in 40 CFR 63.6625(i) shall be completed.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.II.E.4	The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.II.E.5	The Permittee shall inspect all hoses and belts every 500 hours or operation or annually, whichever comes first, and replace as necessary.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
<b>Attachment "B", Specific Conditions – Section III, Diesel Storage Tanks</b>				
Section B.III.B.1.a	The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under the Permittee's control in such quantities or concentrations as to cause air pollution.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.III.B.1.a	Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator therefor to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.	Standard operating procedure; recordkeeping; compliance review	Continuous	No
Section B.III.B.2	Compliance with the terms of this condition shall be deemed compliance with A.C.C. R18-2-730.D, -730.F, and -730.G.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
<b>Attachment "B", Specific Conditions – Section IV, Fugitive Dust Requirements</b>				
Section B.IV.B.1.a.1	Opacity of emissions from any fugitive dust non-point source shall not be greater than 40 percent measured in accordance with the Arizona Testing Manual, Reference Method 9	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.2	The Permittee shall not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20 percent opacity.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3	The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No



Section B.IV.B.1.b.2.b.i-ii	the observer, the date and location on which the observation was made, and the results of the observation. If the observer sees a visible emission from a fugitive dust source that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall take a six-minute Method 9 observation of the visible emission. (i) If the six-minute opacity of the visible emission is less than or equal to the applicable opacity standard, the observer shall make a record of the results of the Method 9 observation; (ii) If the six-minute opacity of the visible emission exceeds the applicable opacity standard, then the Permittee shall adjust or repair the controls or equipment to reduce opacity to below the applicable standard; and report it as an excess emission under Section XII.A of Attachment "A". The Permittee shall make a record of the results of the Method 9 observation, the corrective action taken and the excess emission report.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.c	Compliance with conditions of the Part shall be deemed compliance with A.A.C R18-2-604.A & B, -605, -606, -607, -614 and -702.B.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
<b>Attachment "B", Specific Conditions – Section V, Other Periodic Activity Requirements</b>				
Section B.V.A.1.a	Abrasive Blasting: Opacity of Visible Emissions: Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices: (a) wet blasting; (b) effective enclosures with necessary dust collecting equipment; (c) any other method approved by the Director.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.V.A.1.b	The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity, as measured by EPA Reference Method 9.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.V.A.2	Each time an abrasive blasting project is conducted, the Permittee shall log in indelible ink or in an electronic format, a record of the following: a. The date the project was conducted; b. The duration of the project; and c. Type of control measures employed.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.V.A.3	Permit Shield	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A

Section B.IV.B.1.a.3.a	Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.b	Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.c	Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.d	Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.e	Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.f	Take reasonable precautions, such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.g	Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.a.3.h	Any other method as proposed by the Permittee and approved by the Director.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.b.1	The Permittee shall maintain records of the dates on which any of the activities listed in Conditions IV.B.1.a(3)(a) through IV.B.1.a(3)(h) were performed and the control measures that were utilized.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.IV.B.1.b.2.a	A certified Method 9 observer shall conduct a quarterly visual survey or visible emission from the fugitive dust sources. The Permittee shall keep a record of the name of	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No

	and spot painting projects shall be exempt from the record keeping requirements of part a. above.			
Section B.V.B.2.a	The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20 percent opacity, as measured by EPA Reference Method 9.	Standard operating procedure; Method 9 observations; recordkeeping; compliance review	Continuous	No
Section B.V.B.2.b	Permit Shield	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.V.C.1	The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emission Standards for Hazardous Air Pollutants - Asbestos)	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section B.V.C.2	The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.	Recordkeeping; compliance review	Continuous	No
Section B.V.C.3	Permit Shield	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
<b>Attachment "B", Specific Conditions - Section VI, Mobile Sources Requirements</b>				
Section B.VI.A	The requirements of this section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.90.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.VI.B.1.a	The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway.	Standard operating procedure; Method 9 observations; compliance review	Continuous	No
Section B.VI.B.1.b.1	The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold	Standard operating procedure; Method 9 observations; compliance review	Continuous	No



Section B.V.B.1.a.1	While performing spray painting operations, the Permittee shall comply with the following requirements: (1) The Permittee shall not conduct or cause to be conducted any spray painting operations without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96% of the overspray.	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section B.V.B.1.a.2	The Permittee or their designated contractor shall not either: (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or (b) Thin or dilute any architectural coating with a photochemically reactive solvent.	Standard operating procedure; recordkeeping; compliance review.	Continuous	No
Section B.V.B.1.a.3	For the purposes of Condition V.B.1.a.(2) a photochemically reactive solvent shall be any solvent with an aggregate of more than 20% of its total volume composed of the chemical compounds classified in Conditions V.B.1.a(3)(a) through V.B.1.a(3)(c), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: (a) A combination of the following types of compounds having an olefinic or cycle-olefinic type of unsaturation- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 % (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8% (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20%.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.V.B.1.a.4	Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition V.B.1.a(3)(a) through V.B.1.a(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A
Section B.V.B.1.b	Use of Paints: (1) Each time a spray painting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following: (a) The date the project was conducted; (2) The duration of the project; (c) Type of control measures employed; (d) Material Safety Data Sheets for all paints and solvents used in the project; and (e) The amount of paint consumed during the project. (2). Architectural coating	Standard operating procedure; recordkeeping; compliance review.	Continuous	No

	equipment shall be exempt from this requirement for the first ten minutes.				
Section B.VI.B.1.b.2	The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40 percent.	Standard operating procedure; Method 9 observations; compliance review	Continuous	No	
Section B.VI.B.1.c		Standard operating procedure; Method 9 observations; compliance review	Continuous	No	
Section B.VI.B.2	The Permittee shall keep a record of all emissions related maintenance activities performed on the Permittee's mobile source stationed at the facility as per manufacturer's specifications.	Standard operating procedure; recordkeeping; compliance review.	Continuous	No	
Section B.VI.B.3	Compliance with the conditions of the Part shall be deemed compliance with A.A.C R18-2-801, -802, and -804.	N/A Explanatory statement of law and therefore is not amenable to compliance certification.	N/A	N/A	

## 17. Compliance Certification

### Certification of Compliance

I, Stephen Worthington as Responsible Official, Plant Manager for the APS Fairview Generating Station, hereby certify that:

1. The applicable requirements for the Fairview Generating Station that are the basis of this certification are set forth in the Fairview Title V Permit.
2. The Fairview Generating Station is in compliance with the applicable requirements listed in the Fairview Title V Permit, and will comply with any additional requirements, if any, become applicable during the permit term.
3. The methods used to determine compliance with the listed applicable requirements are set forth in Sections 9 of this permit application and in the Fairview Title V Permit.
4. Arizona Public Service Company will submit required semi-annual compliance certifications no later than May 15<sup>th</sup>, for operations between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year, and the second report will be submitted no later than November 15<sup>th</sup>, for operations between April 1<sup>st</sup> and September 30<sup>th</sup>.
5. Based on information and belief formed after reasonable inquiry, the statement and information in the permit application are true, accurate and complete.



Date: 9/3/19

Stephen Worthington  
Fairview Plant Manager



Sources subject to the Federal acid rain regulations shall use nationally-standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the Act and incorporated pursuant to A.A.C. R18-2-333. Not applicable to facility per 40 CFR § 72.6.

The Fairview Generating Station is an existing major source as defined in A.A.C. R18-2-101.38 and R18-2-401-9.b and has not undergone a major modification.

POLLUTANT	Frame 5 Combustion Turbine					
	Emission Factor	Source	Heat Input	Operating Hours	POTENTIAL TO EMIT	
	lb/mmBtu		mmBtu/hr	hr/yr	lb/hr	tons/yr
CO	4.0E-03	Source Test <sup>1</sup>	296	8,760	1.18	5.2
NO <sub>x</sub>	6.1E-01	Source Test <sup>1</sup>	296	8,760	181.40	794.5
PM	1.2E-02	AP-42	296	8,760	3.55	15.6
PM <sub>10</sub>	1.2E-02	AP-42	296	8,760	3.55	15.6
PM <sub>2.5</sub>	1.2E-02	AP-42	296	8,760	3.55	15.6
SO <sub>2</sub>	5.4E-02	Calculated <sup>2</sup>	296	8,760	15.86	69.5
VOC	4.1E-04	AP-42	296	8,760	0.12	0.5
CO <sub>2</sub>	1.6E+02	AP-42	296	8,760	46,459.44	203,492.3
1,3-Butadiene	1.6E-05	AP-42	296	8,760	0.00	0.0
Benzene	5.5E-05	AP-42	296	8,760	0.02	0.1
Formaldehyde	2.8E-04	AP-42	296	8,760	0.08	0.4
Naphthalene	3.5E-05	AP-42	296	8,760	0.01	0.0
PAH	4.0E-05	AP-42	296	8,760	0.01	0.1
Arsenic	1.1E-05	AP-43	296	8,760	0.00	0.0
Beryllium	3.1E-07	AP-44	296	8,760	0.00	0.0
Cadmium	4.8E-06	AP-45	296	8,760	0.00	0.0
Chromium	1.1E-05	AP-46	296	8,760	0.00	0.0
Lead	1.4E-05	AP-47	296	8,760	0.00	0.0
Manganese	7.9E-04	AP-48	296	8,760	0.23	1.0
Mercury	1.2E-06	AP-49	296	8,760	0.00	0.0
Nickel	4.6E-06	AP-50	296	8,760	0.00	0.0
Selenium	2.5E-05	AP-51	296	8,760	0.01	0.0

<sup>1</sup> APS conducted a source test of the Fairview CT on 6/8/2001. The CO and NO<sub>x</sub> emission factors listed were approved by ADEQ.

<sup>2</sup> SO<sub>2</sub> emission factor is calculated based on sulfur weight percent, density and heat content.

lb/hr = Emission Factor (lb/mmBtu) x Heat Input (mmBtu/hr)

tons/yr = lb/hr x Operating Hours (hr/yr)



$\text{lb/hr} = (\text{Emission Factor (g/kWhr)} \times \text{kw}) / 454$
$\text{tons/yr} = \text{lb/hr} \times \text{Operating Hours (hr/yr)}$

## Section 2.5- PSD/NNSR/Minor NSR Applicability

This facility is not subject to PSD, NNSR, or Minor NSR.



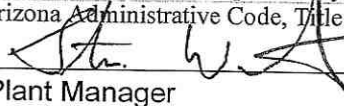
CTS: 392207

**SECTION 2.1**  
**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Air Quality Division  
1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338

**STANDARD CLASS I PERMIT APPLICATION FORM**

*(As required by A.R.S. § 49-426, and Chapter 2, Article 3, Arizona Administrative Code)*

1. Permit to be issued to (Business license name of organization that is to receive permit):  
Arizona Public Service Company
2. Mailing Address: 400 North 5th Street, MS 9303  
City: Phoenix State: AZ ZIP: 85004
3. Name (or names) of Owners/ Principals: Arizona Public Service Company  
Phone: 480-446-0131 Fax: \_\_\_\_\_ Email: \_\_\_\_\_
4. Name of Owner's Agent: Arizona Public service Company  
Phone: 480-446-0131 Fax: \_\_\_\_\_ Email: \_\_\_\_\_
5. Plant/Site Manager/ Contact Person and Title: Fairview Generating Station/Stephen Worthington/ Plant Manager  
Phone: 480-446-0131 Fax: \_\_\_\_\_ Email: Stephen.Worthington@aps.com
6. Plant Site Name: Fairview Generating Station
7. Plant Site Location Address: Sulphur Springs and Lawrence  
City: Douglas County: Cochise Zip Code: 85607  
Indian Reservation (if applicable, which one): \_\_\_\_\_  
Latitude/ Longitude, Elevation: Lat - 31°21'49"N, Long-109°33'7.5", Elv-1000ft  
Section/ Township/ Range: Cochise
8. General Nature of Business: Electric Power generation
9. Type of Organization:  
☒ Corporation ☐ Individual Owner ☐ Partnership ☐ Government Entity (Government Facility Code: -----)  
☐ Other \_\_\_\_\_
8. Permit Application Basis: ☐ New Source ☒ Revision ☒ Renewal of Existing Permit  
(Check all that apply.)  
For renewal or modification, include existing permit number (and exp. date): 61353, March 19, 2020  
Date of Commencement of Construction or Modification: \_\_\_\_\_  
Primary Standard Industrial Classification Code: Permit Class 1
9. I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the Permit. I will present a certification of compliance to ADEQ no less than annually and more frequently if specified by ADEQ. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.  
Signature of Responsible Official:   
Official Title of Signer: Plant Manager  
Typed or Printed Name of Signer: Stephen Worthington  
Date: 9/3/19 Telephone Number: 480-446-0131

## **SECTION 2.0**

### **CLASS I PERMIT APPLICATION PACKAGE**

## Section 1.5 -Fee Rule Summary for Class I Sources - Revised 2016

Effective November 1, 2016

### PERMIT PROCESSING FEE

INDIVIDUAL PERMIT APPLICATION FEE	None
GENERAL PERMIT APPLICATION FEE	\$500
ACCELERATED PERMIT APPLICATION FEE	\$15,000

PERMIT PROCESSING FEE PER HOUR	\$155.50
<i>(New, Renewal, Minor Revision, Significant Revision)</i>	
PERMIT TRANSFERS	None
ADMINISTRATIVE AMENDMENTS	None

### ANNUAL FEES (Due by February 1 of each year)

#### INDIVIDUAL PERMITS

##### Administrative Fee

Aerospace	\$ 24,230
Air Curtain Destructors	\$ 870
Cement Plants	\$ 74,190
Combustion/Boilers	\$ 18,030
Compressor Stations	\$ 14,830
Electronics	\$ 23,870
Expandable Foam	\$ 17,100
Foundaries	\$ 22,740
Landfills	\$ 18,590
Lime Plants	\$ 70,080
Copper & Nickel Plants	\$ 17,470
Gold Mines	\$ 17,470
Mobile Home Manufacturing	\$ 17,280
Paper Milles	\$ 23,860
Paper Coaters	\$ 18,030
Petroleum Products Terminals	\$ 26,480
Polymeric Fabric Coaters	\$ 23,860
Reinforced Plastics	\$ 18,030
Semiconductors Fabrication	\$ 31,370
Copper Smelters	\$ 74,190
Utilities - Fossil Fuel Fired Except Coal	\$ 19,150
Utilities - Coal Fired	\$ 37,940
Vitamin/Pharmaceutical	\$ 18,410
Wood Furniture	\$ 18,030
Others	\$ 23,870
Others with Continuous Emission Monitoring	\$ 23,870

##### Emissions Based Fee

Fee Per Ton of Regulated Air Pollutant	\$ 44.60
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## **SECTION 1.0 - GENERAL INFORMATION**

### **1.1 OPPORTUNITIES TO CONSULT**

The Department is available for consultation meetings. For complex and time-sensitive projects, it is strongly recommended that facilities request a pre-application meeting where discussions can focus on timeline expectations and application components necessary for processing of the permit.

Additionally, the Department recommends a permit application submittal meeting whereby facility personnel and their consultants can meet with Department staff. In such a meeting, an application component review can be conducted and any missing pieces of information can be identified. Such meetings should realize fairly substantial decreases in the time necessary to process the permit.

All requests should be made by contacting the Department at (602) 771-2338.

### **1.2 MINOR NSR APPLICABILITY**

Any Class I Permit or Permit Revision may be subject to Minor New Source Review. Applicants are advised to refer to Minor NSR Review Guidance Document available at:

Also, Section 2.5 of this package provides the method for determining Minor NSR Applicability for new and modified sources.

### **ADEQ TIMEFRAME FOR ADMINISTRATIVE COMPLETENESS REVIEW**

- 1.3** ADEQ will determine if the permit application is administratively complete within 10 calendar days after a permit application is received.

### **ADEQ TIMEFRAME FOR PROCESSING CLASS I PERMITS**

- 1.4** After receiving a complete permit application, ADEQ will strive to take final action on the permit application within the following timeframes:

Class I PSD/ NNSR Permit:	365 calendar days
Class I Permit:	180 calendar days
Significant Permit Revision:	180 calendar days
Minor Permit Revision:	75 calendar days

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# **APPLICATION PACKET FOR A CLASS I PERMIT**



## **Arizona Department of Environmental Quality**

### **Air Quality Division**

**1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338**



## SECTION 2.2 - EMISSION SOURCES

Estimated "Potential to Emit" per A.A.C. R18-2-101.

Review of applications and issuance of permits will be expedited by supplying all necessary information on this Table.

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
DATE \_\_\_\_\_

[illegible]

**General Instructions:**

1. Identify each emission point with a unique number for this plant site, consistent with emission point identification used on plot plan, previous permits, and Emissions Inventory Questionnaire. Include fugitive emissions. Limit emission point number to eight (8) character spaces. For each emission point use as many lines as necessary to list regulated air pollutant data. Typical emission point names are: heater, vent, boiler, tank, reactor, separator, baghouse, fugitive, etc. Abbreviations are O.K.
2. Components to be listed include regulated air pollutants as defined in A.A.C. R18-2-101. Examples of typical component names are: Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>), Sulfur Dioxide (SO<sub>2</sub>), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM<sub>10</sub>), etc. Abbreviations are O.K.
3. Pounds per hour (PPH) is maximum potential emission rate expected by applicant.
4. Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.
5. As a minimum applicant shall furnish a facility plot plan as described in the filing instructions. UTM coordinates are required only if the source is a major source or is required to perform refined modeling for the purposes of demonstrating compliance with ambient air quality guidelines.
6. Supply additional information as follows if appropriate:
  - (a) Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
  - (b) Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.
7. Dimensions of nonpoint sources as defined in A.A.C. R18-2-101.

The following table should include all equipment utilized at the facility, and should be completed with all the requested information. Be sure to notate the units (tons/hour, horsepower, etc.) when recording the Maximum Rated Capacity information, the Serial Number and/or the Equipment ID Number. The date of manufacture must be included in order to determine if portions of the facility are NSPS applicable. Make additional copies of this form if necessary.

*Class I Permit Application*  
*Definitions for all terms that are bolded and italicized can be found starting on page 23.*

## SECTION 2.4 - PERMIT APPLICATION FORM FILING INSTRUCTIONS

No application shall be considered properly filed until the Director has determined that all information required by this application form and the applicable statutes and regulations has been submitted. The Director may waive certain application requirements for specific source types. For Permit Revision applications, the applicant need only supply the information directly related to the revision. In addition to the information required on the application form, the applicant shall supply the following:

1. Description of the process to be carried out in each unit (include Source Classification Code).
2. Description of product(s).
3. Description of alternate operating scenario, if desired by applicant (include Source Classification Code).
4. Description of alternate operating scenario product(s), if applicable.
5. A flow diagram for all processes.
6. A material balance for all processes (optional, only if emission calculations are based on a material balance).
7. Emissions Related Information:
  - a. The source shall submit the potential emissions of regulated air pollutants as defined in A.A.C. R18-2-101 for all emission sources. Emissions shall be expressed in pounds per hour, tons per year, and such other terms as may be requested. Emissions shall be submitted using the standard "Emission Sources" portion of the "Standard Permit Application Form." Emissions information shall include fugitive emissions in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source in A.A.C. R18-2-101.
  - b. The source shall identify and describe all points of emissions, and shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which requirements are applicable to the source and sufficient to determine any fees under this Chapter.
8. Citation and description of all applicable requirements as defined in A.A.C. R18-2-101 including voluntarily accepted limits pursuant to A.A.C. R18-2-306.01.
9. An explanation of any proposed exemptions from otherwise applicable requirements.
10. The following information to the extent it is needed to determine or regulate emissions or to comply with the requirements of A.A.C. R18-2-306.01:
  - a. Maximum annual process rate for each piece of equipment which generates air emissions.
  - b. Maximum annual process rate for the whole plant.
  - c. Maximum rated hourly process rate for each piece of equipment which generates air emissions.
  - d. Maximum rated hourly process rate for the whole plant.
  - e. For all fuel burning equipment including generators, a description of fuel use, including the type used, the quantity used per year, the maximum and average quantity used per hour, the percent used for process heat, and higher heating value of the fuel. For solid fuels and fuel oils, state the potential sulfur and ash content.



- f. A description of all raw materials used and the maximum annual and hourly, monthly, or quarterly quantities of each material used.
  - g. Anticipated Operating Schedules
    - (i) Percent of annual production by season.
    - (ii) Days of the week normally in operation.
    - (iii) Shifts or hours of the day normally in operation.
    - (iv) Number of days per year in operation.
  - h. Limitations on source operations and any work practice standards affecting emissions.
11. A description of all process and control equipment for which permits are required including:
- a. Name.
  - b. Make (if available).
  - c. Model (if available).
  - d. Serial number (if available).
  - e. Date of manufacture (if available).
  - f. Size/production capacity.
  - g. Type.
12. Stack Information:
- a. Identification.
  - b. Description.
  - c. Building Dimensions.
  - d. Exit Gas Temperature.
  - e. Exit Gas Velocity.
  - f. Height.
  - g. Inside Dimensions.
13. Site diagram which includes:
- a. Property boundaries.
  - b. Adjacent streets or roads.
  - c. Directional arrow.
  - d. Elevation.
  - e. Closest distance between equipment and property boundary.
  - f. Equipment layout.

- g. Relative location of emission sources or points.
- h. Location of emission points and non-point emission areas.
- i. Location of air pollution control equipment.

14. Air Pollution Control Information:

- a. Description of or reference to any applicable test method for determining compliance with each applicable requirement.
- b. Identification, description and location of air pollution control equipment, including spray nozzles and hoods, and compliance monitoring devices or activities.
- c. The rated and operating efficiency of air pollution control equipment.
- d. Data necessary to establish required efficiency for air pollution control equipment (e.g. air to cloth ratio for baghouses, pressure drop for scrubbers, and warranty information).
- e. Evidence that operation of the new or modified pollution control equipment will not violate any ambient air quality standards, or maximum allowable increases under A.A.C. R18-2-218.

15. Equipment manufacturer's bulletins or shop drawings are acceptable for the purposes of supplying the information required by any item in numbers 11, 12, or 14 above.

16. Compliance Plan:

- a. A description of the compliance status of the source with respect to all applicable requirements including, but not limited to:
  - (i) A demonstration that the source or modification will comply with the applicable requirements contained in Article 6.
  - (ii) A demonstration that the source or modification will comply with the applicable requirements contained in Article 7.
  - (iii) A demonstration that the source or modification will comply with the applicable requirements contained in Article 8.
  - (iv) A demonstration that the source or modification will comply with the applicable requirements contained in Article 9.
  - (v) A demonstration that the source or modification will comply with the applicable requirements contained in Article 11 and in rules promulgated pursuant to A.R.S. § 49-426.03.
  - (vi) A demonstration that the source or modification will comply with the applicable requirements contained in Article 17.
  - (vii) A demonstration that the source or modification will comply with any voluntarily accepted limitations pursuant to A.A.C. R18-2-306.01.
- b. A compliance schedule as follows:
  - (i) For applicable requirements with which the source is in compliance, a statement that the source

will continue to comply with such requirements.

- (ii) For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.
  - (iii) A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- c. A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation.
  - d. The compliance plan content requirements specified in this paragraph shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the Act and incorporated pursuant to A.A.C. R18-2-333 with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

17. Compliance Certification:

A certification of compliance with all applicable requirements including voluntarily accepted limitations pursuant to A.A.C. R18-2-306.01 by a responsible official consistent with A.A.C. R18-2-309.5. The certification shall include:

- a. Identification of the applicable requirements which are the basis of the certification;
- b. A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;
- c. A schedule for submission of compliance certifications during the permit term to be submitted no less frequently than annually, or more frequently if specified by the underlying applicable requirement or by the permitting authority; and
- d. A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements.
- e. A certification of truth, accuracy, and completeness pursuant to A.A.C. R18-2-304.H.

18. Acid Rain Program Compliance Plan:

Sources subject to the Federal acid rain regulations shall use nationally-standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the Act and incorporated pursuant to A.A.C. R18-2-333.

19. A new major source as defined in A.A.C. R18-2-401 or a major modification shall submit all information required



in this Section and information necessary to show compliance with Article 4 including, but not limited to:

a. For sources located in a Non-Attainment Area:

- (i) In the case of a new major source as defined in A.A.C. R18-2-401 or a major modification subject to an emission limitation which is LAER (Lowest Achievable Emission Rate) for that source or facility, the application shall contain a determination of LAER that is consistent with the requirements of the definition of LAER contained in A.A.C. R18-2-101. The demonstration shall contain the data and information relied upon by the applicant in determining the emission limitation that is LAER for the source or facility for which a permit is sought.
- (ii) In the case of a new major source as defined in A.A.C. R18-2-401 or a major modification subject to the certification requirement of A.A.C. R18-2-403.A.2, the applicant shall submit such certification in a form that lists and describes all existing major sources owned or operated by the applicant and a statement of compliance with all conditions contained in the permits or conditional orders of each of the sources.
- (iii) In the case of a new major source as defined in A.A.C. R18-2-401 or a major modification subject to the offset requirements described in A.A.C. R18-2-403.A.3, the applicant shall demonstrate the manner in which the new major source or major alteration meets the requirements of A.A.C. R18-2-404.
- (iv) An applicant for a new major source as defined in A.A.C. R18-2-401 or a major modification for volatile organic compounds or carbon monoxide (or both) which will be located in a nonattainment area for photochemical oxidants or carbon monoxide (or both) shall submit the analysis described in A.A.C. R18-2-403.B.

b. For sources located in an Attainment Area:

- (i) A demonstration of the manner in which a new major source or major modification which will be located in an attainment area for a pollutant for which the source is classified as a major source as defined in A.A.C. R18-2-401 or the modification is classified as a major modification will meet the requirements of A.A.C. R18-2-406.
- (ii) In the case of a new major source as defined in A.A.C. R18-2-401 or major modification subject to an emission limitation which is BACT (Best Available Control Technology) for that source or facility, the application shall contain a determination of BACT that is consistent with the requirements of the definition of BACT contained in A.A.C. R18-2-101. The demonstration shall contain the data and information relied upon by the applicant in determining the emission limitation that is BACT for the source or facility for which a permit is sought.
- (iii) In the case of a new major source as defined in A.A.C. R18-2-401 or major alteration required to perform and submit an air impact analysis in the form prescribed in A.A.C. R18-2-407, such an analysis shall meet the requirements of A.A.C. R18-2-406. Unless otherwise exempted in writing by the Director, the air impact analysis shall include all of the information and data specified in A.A.C. R18-2-407.
- (iv) If an applicant seeks an exemption from any or all of the requirements of A.A.C. R18-2-406, the applicant shall provide sufficient information and data in the application to demonstrate compliance with the requirements of the subsection(s) under which an exemption is sought.

20. Calculations on which all information requested in this application is based.

## SUBMITTING A COMPLETE PERMIT APPLICATION

These directions are to be used in conjunction with the Standard Permit Application and Filing Instructions contained in Section 2.4 of this package, and are to be used for permit applications to construct new, reconstruct, renew, or modify existing equipment.

The application form and filing instructions are designed to assist the applicant in providing the information which will allow the Arizona Department of Environmental Quality (ADEQ) to determine the applicable regulations, determine if the standards will be met, and determine the applicable fees.

Standard Permit Application Form (Page 6 of the Application Packet)

ADEQ requires all applicants to submit the Standard Application Form.

*Items #1 through #5* of the application form are self-explanatory. The rest are explained below in detail.

*Item #6* asks for the Plant/Site Manager or Contact Person. This should be the person who is responsible for implementing the permit at the facility and the person ADEQ may contact for additional information.

*Item #7* requests the current or proposed location of the facility.

*Item #8* asks for the general nature of business. This should be in terms of what is produced at the plant.

*Item #9*, if the "other" box is checked, please be specific as to what the organization is.

*Item #10*, Permit Application Basis, indicates what type of permit is necessary. If the facility is already permitted and is applying for a permit revision or renewal, then the current permit number must be included. The Date of Commencement of Construction or Modification is the expected date that construction will begin. This date need not be definite. The Standard Industrial Classification Code is a number which describes the type of facility. The State Permit Class is the class of permit which was issued to the facility under the previous permitting program. The state permit class and Standard Industrial Classification Code can be obtained by contacting ADEQ at (800) 234-5677, extension 602-771-2338.

*Item #11*, The "Responsible Official" is the owner or a partner of the company in most cases. Please see the definition of "Responsible Official" in Section 3.0 of this package.

### Citation and Description of all Applicable Requirements

Applicants must list all federal and state requirements which apply to the source. These may include:

- Federal New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutant (NESHAP)
- PSD/ NSR permit requirements
- Testing requirements
- Monitoring requirements
- Acid Rain Program requirements

"Insignificant Activities" listed in A.A.C. R18-2-101.68 are exempt from permitting.

*Note:* Insignificant activities must be listed in the application but the associated emissions or equipment details need not be included.



### Process Description

This description should help ADEQ staff to understand the manufacturing process used at the facility. The description should include description of the:

- Process to be carried out in each unit
- Products
- Raw materials, intermediates and products (including fuels, solvents etc.) and
- Process flow diagram (should track the process description)

### Description of Alternate Operating Scenarios

Applicants may submit alternating operating scenarios (AOS) for operational flexibility. Advantages are:

- AOS are incorporated into the permit and allows operational changes without a permit revision
- Source need not contact ADEQ to switch to alternate operating scenario, but must keep a record.

Examples include varying:

- Fuels
- Solvents
- Equipment Configurations
- Products
- Raw Materials

Application must include for each scenario:

- Additional regulations which apply to the Scenario
- Process Description
- Process Flow Diagram

### Site Diagram

- Equipment and Building Layout
- Building Heights
- Location of Emission Points
- Property Boundaries
- Adjacent Streets
- Directional Arrow
- Elevation
- Scale (ADEQ will accept diagrams which are not scaled, but all dimensions must be shown)

### Air Pollution Control Information

- Identification, location, and description of air pollution control equipment and techniques for example:
  - scrubbers
  - spray nozzles
  - water trucks
  - compliance monitoring activities
- Rated and operating efficiency of control equipment (rated efficiency should be available from the manufacturer of



- the equipment)
- Data used to establish efficiency for example:
  - Air-to-cloth Ratio for Baghouses
  - Pressure Drop for Scrubbers
  - May include warranty or manufacturer guarantee
- Evidence that the new or modified equipment will not violate any ambient air quality standards or PSD increments
  - Typically for a change in equipment at larger sources
- Description of, or reference to, any applicable test method for determining compliance with all requirements

#### Description of all Process and Control Equipment Requiring a Permit Including

- Type of Equipment
- Make
- Model
- Serial Number
- Date of Manufacture
- Rated Capacity or Control Efficiency

*Note:* Not all of the above information will be available to the applicant upon submitting an application. In such a case the application should include at least the type and the anticipated capacity of the equipment.

#### Emissions

Applicants must submit the potential emissions of the facility. Emission estimates allow ADEQ to determine the applicable requirements, the ambient air impacts, and whether or not the standards can be met.

#### Potential Emissions

- Maximum capacity of a source to emit a pollutant under its physical and operational design
- Physical and operational design includes:
  - Limitations on hours of operation
  - Operational limitations on process rate
  - Pollution Controls
 (These limitations may be included in the final permit)
- Regulated air pollutants
  - Conventional (PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>x</sub>, VOC, CO, Pb, Ozone)
  - Federal Hazardous Air Pollutants (189 compounds)
  - State Hazardous Air Pollutants (not yet finalized)
  - Others (any pollutant subject to a standard, and certain CFCs and HCFCs)
- Include fugitive emissions

#### Emissions for Alternate Operating Scenarios

- Emissions for each scenario are preferred
- ADEQ may accept emissions from the scenario with the highest emission rate
- All possible compounds which may be emitted must be listed

(For example, if the applicant wants to be permitted to use two different equipment configurations which cause the same type pollutants to be emitted but at different rates, only the higher emissions need to be submitted. However, if the applicant wants to be permitted to use two different types of solvents, emissions from both solvents must be included.)

## Emission Sources Form

The Emissions Sources Form is to be used to submit the emissions in a concise manner. This form is included in Attachment 1. The emission point name and number should correspond to the site diagram. The potential emissions must be reported in terms of pounds per hour and tons per year. Universe Transmercator (UTM) coordinates are only required for major sources. The exit height of the stack above the ground and above the building must be shown. In addition, the inside dimensions or diameter of the exit as well as the exit gas velocity and exit gas temperature should be included. Finally, the length and width of the area which encompasses the fugitive emissions are required.

## Calculating Emissions

- EPA's Compilation of Air Pollutant Emission Factors (AP-42)
  - most commonly used and always accepted
  - generally does not include HAPs emissions
  - generally does not speciate VOCs
- Emission tests from a similar plant or the actual plant
- Other published studies provided conditions are similar (will be used most often to estimate HAPs)
- Engineering calculations such as a material balance
- Include all information and references used to estimate emissions (ADEQ prefers copies of the references used)

## Information Used to Estimate Emissions

- Maximum annual and hourly process rates for each piece of equipment
- Maximum annual and hourly process rates for the whole plant
- Type and composition of fuels used (e.g. sulfur content)
- Annual and hourly quantity of fuel used
- Heating value of fuel
- Annual and hourly quantity of raw materials used
- Operating schedule
  - Hours per day
  - Days Per year
  - Percent of annual production by season
- Material balance (if used)
- All calculations

## Additional Requirements for New Major Sources or Modifications in Nonattainment Areas

- Lowest achievable emission rate (LAER) determination
- Demonstration that existing sources owned by the applicant are in compliance
- Offset determination
- Site and environmental analysis

## Additional Requirements for New Major Sources or Modifications in Attainment Areas

- Demonstration of how the plant will meet requirements
- Best available control technology (BACT) determination
- Ambient air impact analysis

### Compliance Plan

- Description of compliance status of the source with respect to each requirement including any existing permit conditions (for existing sources)
- Description of how a new source or modification will comply with the applicable requirements (e.g. control schemes, record keeping, submission of reports)
- A compliance schedule is required for requirements with which the source is not in compliance

### Compliance Schedule

- A statement that the source will continue to comply with requirements with which the plant currently complies
- A statement that the source will meet requirements which become effective during the permit term
- Sequence of actions for remedial measures
- Milestones leading to compliance
- Schedule for submission of progress reports (reports must be submitted at least every six months)

### Compliance Certification

- Certification of compliance with applicable requirements (for items with which the source is in compliance)
- Statement of the methods used to determine compliance
  - Emission Testing
  - Records
  - Monitoring
  - Inspection reports by ADEQ
- Schedule for submission of compliance certifications at least annually
- Certification of truth accuracy and completeness (applies to the entire application, signed by the responsible official)

Note: Applicants are legally required to correct any incomplete or incorrect information submitted in the application upon discovery.



## SECTION 2.5 - PSD/ NNSR/ Minor NSR Applicability

This Section of the application package is intended to assist the applicant in determining the applicability of Prevention of Significant Deterioration (PSD), Non-attainment New Source Review (NNSR), and Minor New Source Review (Minor NSR).

### I. New Source

#### A. Calculations

Determine the facility-wide *potential to emit (PTE)* for each regulated air pollutant. Fugitive emissions should be included for **categorical sources**.

#### B. PSD Applicability for Attainment Pollutants and non-NAAQS NSR Pollutants

If the facility has at least one *regulated NSR pollutant* with the PTE equal to or greater than the major source threshold under A.A.C. R18-2-401.13.b, then PSD requirements apply to each *regulated NSR pollutant* for which the PTE is *significant*.

#### C. NNSR Applicability for Non-Attainment Pollutants

Non-attainment New Source Review (NNSR) applies to each non-attainment *regulated NSR pollutant* with the PTE equal to or greater than the major source threshold under A.A.C. R18-2-401.13.a.

#### D. Minor NSR Applicability

##### 1. For Class I Sources Subject to NNSR/ PSD Review under Article 4

For any *regulated minor NSR pollutant* not subject to PSD/ NNSR review, the Minor NSR program applies if the PTE for that pollutant is equal to or greater than the *permitting exemption threshold*.

##### 2. Class I Sources Not Subject NNSR/ PSD Review under Article 4

The Minor NSR program applies to each *regulated minor NSR pollutant* with the PTE equal to or greater than the *permitting exemption threshold*.

### II. Modifications

#### A. Calculations:

##### 1. For any *regulated NSR pollutant* that is previously subject to Article 4 (Major Source) (NNSR/ PSD) requirements:

Calculate the project emissions increase as well as the net emission increase following the procedures outlined in A.A.C. R18-2-402.D for such *regulated NSR pollutant*.

##### 2. For each *regulated air pollutant*:

- a. Previously emitted, determine the *PTE* increase for each modified unit.
- b. Not previously emitted, determine the *PTE* for each modified unit.
- c. Emitted from a new emission unit, determine the *PTE* for the new unit.

- d. Determine the project **PTE** increase.

Note: A change constitutes a **minor NSR modification** regardless of whether there will be a net decrease in total source emissions, or a net increase in total source emissions that is less than the **permitting exemption thresholds** as a result of decreases in the PTE of other emission units at the same stationary source.

B. Modification at Class I Sources Subject to Article 4

1. PSD/ NNSR Applicability

For any **regulated NSR pollutant** that is previously subject to Article 4 (Major Source) (NNSR/ PSD) requirements, determine the project emissions increase as well as net emission increase following A.A.C. R18-2-402.D for such **regulated NSR pollutant**. If the project would result in a significant emission increase as well as net emissions increase, the change is a major modification for that pollutant, and is subject to NNSR or PSD.

2. Minor NSR Applicability

Unless a **regulated minor NSR pollutant** is subject to PSD/ NNSR review in 1 above, the Minor NSR Program shall be applicable to any **regulated minor NSR pollutant** with PTE increase equal to or greater than the **permitting exemption threshold**.

C. Modification at Class I Sources Not Subject to Article 4

For any **regulated minor NSR pollutant** if the PTE increase is equal to or greater than the **permitting exemption threshold**, such pollutants will be subject to the Minor NSR Program.

D. One Time Doubling

Unless the source is an existing **major source** for NNSR/ PSD purposes, a project will not trigger PSD/NNSR review as long as the emission increases from the project remains under the applicable thresholds (100 tons per year for **categorical sources** and 250 tons per year for non-categorical sources). If the project results in the source being classified as a major source as defined in Article 4, then future projects would be evaluated for PSD/ NNSR against **significant** thresholds.

### III. Minor NSR Requirements

- A. For each **regulated minor NSR pollutant** that is subject to Minor NSR requirements, there are two options from which an applicant has to choose: Modeling or **Reasonably Available Control Technology (RACT)**. Details for each option are listed below:

1. Modeling

- a. If the applicant requests that ADEQ perform screen modeling, the applicant must provide the following:

- (1) Facility Information

- (a) Detailed facility layout;
    - (b) Location of the facility's fence line;
    - (c) Locations of emission points;



- (d) Location of process equipment (i.e. storage tanks, silos, conveyors, etc.), lay down areas, parking lots, haul roads, maintenance roads, storage piles, etc.; and
  - (e) Location and dimensions of all buildings at the facility.
  - (f) If a site plan becomes too crowded, a table listing all the above information can be provided instead, with the ID traceable on the plot.
- (2) Emission Profiles
- (a) Maximum hourly emission rates (lb/hr); and
  - (b) Maximum annual emission rate (tons/year)
- (3) Stack Parameters
- (a) UTM coordinates;
  - (b) Stack inside diameter;
  - (c) Stack height above ground;
  - (d) Stack gas exit velocity;
  - (e) Stack gas exit temperature;
  - (f) Indicate if the stack is non-vertical or vertical with obstructed emissions (such as a raincap); and
  - (g) If the stack is a non-round stack, provide length and width for a rectangular stack.

ADEQ will perform screen modeling for each pollutant subject to Minor NSR requirements. If screen modeling indicates possible interference with the NAAQS or maintenance of the NAAQS, ADEQ will inform the applicant that refined modeling is necessary to be conducted by the applicant. Refined modeling should be performed in accordance with ADEQ's modeling guidelines that are available online.

ADEQ strongly recommends that the applicant submit a modeling protocol for ADEQ's review and approval. A detailed modeling report, including all modeling files and associated information, must be included in the application.

For expedited permit processing, instead of requesting ADEQ to perform screen modeling, the Permittee may choose to perform screen modeling or refined modeling to demonstrate that the new source or modification will not interfere with the NAAQS.

## 2. RACT

If the applicant chooses to implement RACT, the following steps should be followed:

a.

- (1) For each ***regulated minor NSR pollutant*** subject to minor NSR, evaluate each emission unit for RACT applicability.
- (2) If for any emission unit, the emissions or increase in emissions of a pollutant subject to Minor NSR requirements is greater than 20% of the ***permitting exemption threshold*** for that pollutant, ***RACT*** will be required for that pollutant and emission unit.



- (3) The application should contain the RACT determinations for all pollutants subject to minor NSR program. The application should contain the RACT determinations for all pollutants subject to minor NSR program based on the case by case analysis performed by the applicant. The applicant may use one of the following to determine RACT for the affected emission units:
- (a) EPA RACT/ BACT/ LAER clearinghouse  
<http://cfpub.epa.gov/RBLC/>
  - (b) An emissions standard established or revised by the Administrator for the same type of source under section 111 or 112 of the Act after November 15, 1990. (NSPS/ NESHAP)  
  
Link for NSPS (40 CFR 60.1-60.5499)/ NESHAP (40 CFR 63.1 to 63.12099)  
  
[http://www.ecfr.gov/cgi-bin/text-idx?SID=7716bad8c76b30368044a215ff74fdb&mc=true&tpl=/ecfrbrowse/Title40/40tab\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?SID=7716bad8c76b30368044a215ff74fdb&mc=true&tpl=/ecfrbrowse/Title40/40tab_02.tpl)
  - (c) An applicable requirement of Chapter 2 of the A.A.C. or of air quality control regulations adopted by a County under A.R.S. § 49-479 that has been specifically identified as constituting RACT. As per the following guidance document, the 300 series Maricopa County Rules under Regulation III are considered to be RACT requirements.  
  
[http://maricopa.gov/aq/divisions/permit\\_engineering/docs/pdf/BACT%20Guidance.pdf](http://maricopa.gov/aq/divisions/permit_engineering/docs/pdf/BACT%20Guidance.pdf)  
  
These rules (Rule 300 through Rule 372) are available at:  
  
[http://www.maricopa.gov/aq/divisions/planning\\_analysis/AdoptedRules.aspx](http://www.maricopa.gov/aq/divisions/planning_analysis/AdoptedRules.aspx)
  - (d) A RACT standard imposed on the same type of source by a general permit.
  - (e) A RACT standard imposed on the same type of source no more than 10 years before the date of application submittal. ADEQ will develop a RACT database on an on-going basis and this will be available on the ADEQ website
- (4) Notwithstanding a Permittee's election to conduct a RACT evaluation for a **regulated minor NSR Pollutant**, ADEQ may choose to use its discretion to request dispersion modeling, on case by case basis, to ensure that the NAAQS are not violated.
- (5) Please note that the facility may be in attainment for some applicable pollutants and non-attainment for others.
- (6) An application for a permit revision subject to minor NSR shall be processed as a

significant permit revision, except that the application may be processed as a minor permit revision if one of the following conditions is satisfied for each pollutant subject to minor NSR requirements:

- (a) A RACT standard under (3)(a) through (e) above is imposed on each emissions unit that requires such a standard; or
- (b) The results of the SCREEN model for a *regulated minor NSR pollutant* show that expected concentrations, including background concentrations, are less than 75% of the applicable standard imposed in Article 2 of A.A.C.

### SECTION 3.0 – DEFINITIONS

**Attainment area** means any area in the state that has been identified in regulations promulgated by the Administrator as being in compliance with national ambient air quality standards.

**Categorical Sources** mean the following classes of sources:

1. Coal cleaning plants with thermal dryers;
2. Kraft pulp mills;
3. Portland cement plants;
4. Primary zinc smelters;
5. Iron and steel mills;
6. Primary aluminum ore reduction plants;
7. Primary copper smelters;
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
9. Hydrofluoric, sulfuric, or nitric acid plants;
10. Petroleum refineries;
11. Lime plants;
12. Phosphate rock processing plants;
13. Coke oven batteries;
14. Sulfur recovery plants;
15. Carbon black plants using the furnace process;
16. Primary lead smelters;
17. Fuel conversion plants;
18. Sintering plants;
19. Secondary metal production plants;
20. Chemical process plants, which shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System codes 325193 or 312140;
21. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btus per hour heat input;
22. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
23. Taconite preprocessing plants;
24. Glass fiber processing plants;
25. Charcoal production plants;
26. Fossil-fuel-fired steam electric plants and combined cycle gas turbines of more than 250 million Btus per hour heat input

**Categorical Exempt Activities** mean:

1. Any combination of diesel-, natural gas- or gasoline fired engines with cumulative power equal to or less than 145 horsepower



2. Natural gas-fired engines with cumulative power equal to or less than 155 horsepower
3. Gasoline-fired engines with cumulative power equal to or less than 200 horsepower
4. Any of the following emergency or stand-by engines used for less than 500 hours in each calendar year, provided the permittee keeps records documenting the hours of operation of the engines:
  - a. Any combination of diesel-, natural gas- or gasoline-fired emergency engines with cumulative power equal to or less than 2,500 horsepower.
  - b. Natural gas-fired emergency engines with cumulative power equal to or less than 2,700 horsepower.
  - c. Gasoline-fired emergency engines with cumulative power equal to or less than 3,700 horsepower.
  - d. Any combination of boilers with a cumulative maximum design heat input capacity of less than 10 million Btu/hr

**Construction** means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in actual emissions.

**Elective Limits or Controls** means the owner/operator of a source that requires a registration may elect to include any of the following emission limitations in the registration, provided the registration also includes the operating, maintenance, monitoring, and recordkeeping requirements specified below for the limitation:

1. hours of operation for any process or combination of processes (requires owner/ operator to log hours operated daily)
2. production rate for any process or combination of processes (requires owner/ operator to log production rate daily)
3. fabric filter to control particulate matter emissions (requires owner/ operator to: operate and maintain the fabric filter in accordance with manufacturer's recommendations; operate the fabric filter at all times the emission unit is operated; inspect fabric filter once per month for tears or leaks and promptly repair any tears and leaks identified; and record all inspections and any maintenance activities required as a result of the inspection)
4. VOC or HAP limit on process materials (requires owner/ operator to maintain a log of the VOC or HAP concentrations in each material used during the current calendar year)

**Excluded NSPS/NESHAPS List** includes:

1. 40 CFR 60, Subpart AAA (Residential Wood Heaters)
2. 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines)
3. 40 CFR 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines)
4. 40 CFR 61.145 (Asbestos - Standard for Demolition and Renovation)
5. 40 CFR 63, Subpart ZZZZ (Reciprocating Internal Combustion Engines)
6. 40 CFR 63, Subpart WWWW (Ethylene Oxide Sterilizers)

7. 40 CFR 63, Subpart CCCCCC (Gasoline Distribution)
8. 40 CFR 63, Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations)
9. 40 CFR 63, Subpart JJJJJJ (Industrial, Commercial, and Institutional Boilers Area Sources)
10. 112(r) (Guide to the Accidental Release Prevention Requirements)

**Insignificant Activities mean:**

1. Liquid Storage and Piping Liquid Storage and Piping
  - a. Petroleum product storage tanks containing the following substances, provided the applicant lists and identifies the contents of each tank with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such tank: diesel fuels and fuel oil in storage tanks with capacity of 40,000 gallons or less, lubricating oil, transformer oil, and used oil.
  - b. Gasoline storage tanks with capacity of 10,000 gallons or less.
  - c. Storage and piping of natural gas, butane, propane, or liquefied petroleum gas, provided the applicant lists and identifies the contents of each stationary storage vessel with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such vessel.
  - d. Piping of fuel oils, used oil and transformer oil, provided the applicant includes a system description.
  - e. Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992k. Permit applicants must provide a description of material in the containers and the approximate amount stored.
  - f. Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions, provided the permit applicant specifies the contents of each storage tank with a volume of 350 gallons or more.
  - g. Electrical transformer oil pumping, cleaning, filtering, drying and the re-installation of oil back into transformers.
2. Internal combustion engine-driven electrical generator sets, and internal combustion engine-driven water pumps used for less than 500 hours per calendar year for emergency replacement or standby service, provided the permittee keeps records documenting the hours of operation of this equipment.
3. Low Emitting Processes
  - a. Batch mixers with rated capacity of 5 cubic feet or less.
  - b. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose production rate is 200 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any nonmetallic minerals.



- c. Powder coating operations.
  - d. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
  - e. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
  - f. Plastic pipe welding.
4. Site Maintenance
- a. Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
  - b. Sanding of streets and roads to abate traffic hazards caused by ice and snow.
  - c. Street and parking lot striping.
  - d. Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
5. Sampling and Testing
- a. Noncommercial (in-house) experimental, analytical laboratory equipment which is bench scale in nature, including quality control/quality assurance laboratories supporting a stationary source and research and development laboratories.
  - b. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units.
6. Ancillary Non-Industrial Activities
- a. General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
  - b. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
  - c. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition.
7. Miscellaneous Activities
- a. ~~Installation and operation of potable, process and waste water observation wells, including drilling, pumping, filtering apparatus.~~
  - b. Transformer vents.

**Maintenance Area** means any geographic region of the United States that the EPA previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently



redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended.

**Major Modification** is defined as follows:

1. A major modification is any physical change in or change in the method of operation of a major source that would result in both a significant emissions increase of any regulated NSR pollutant and a significant net emissions increase of that pollutant from the stationary source.
2. Any emissions increase or net emissions increase that is significant for nitrogen oxides or volatile organic compounds is significant for ozone.

**Major Source** means:

1. A major source as defined in A.A.C R18-2-401.
  - a. For purposes of determining the applicability of A.A.C. R18-2-403 through A.A.C. R18-2-405 or A.A.C. R18-2-411, major source means any stationary source that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant, except that the following thresholds shall apply in areas subject to subpart 2, subpart 3 or subpart 4 of part D, Title I of the Act:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold (tons/year or more)
Carbon Monoxide (CO)	CO, Serious, if stationary sources contribute significantly to CO levels in the area as determined under rules issued by the Administrator	50
VOC	Ozone, Serious	50
VOC	Ozone, Severe	25
PM <sub>10</sub>	PM <sub>10</sub> , Serious	70
PM <sub>2.5</sub>	PM <sub>2.5</sub> Serious	70
PM <sub>2.5</sub> precursors identified in A.A.C. R18-2-101(124)(a)	PM <sub>2.5</sub> Serious	70
NO <sub>x</sub>	Ozone, Serious	50
NO <sub>x</sub>	Ozone, Severe	25

- b. For purposes of determining the applicability of A.A.C. R18-2-406 through A.A.C. R18-2-408 or A.A.C. R18-2-410, major source means any stationary source that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant if the source is classified as a

categorical source, or 250 tons per year or more of any regulated NSR pollutant if the source is not classified as a categorical source;

- c. Any stationary source that emits, or has the potential to emit, five or more tons of lead per year;
  - d. A major source that is major for VOC or nitrogen oxides shall be considered major for ozone;
  - e. The fugitive emissions of a stationary source shall not be included in determining whether it is a major source, unless the source belongs to a section 302(j) category.
2. A major source under section 112 of the Act:
- a. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emission 10 tons per year or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tons per year or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of this Chapter. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
  - b. For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.
3. A major stationary source, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tons per year or more of any air pollutant including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to a section 302(j) category.

**Maximum Capacity to Emit** means the maximum capacity of a stationary source to emit a pollutant excluding secondary emissions, under its physical and operational design

**Maximum Capacity to Emit with Elective Controls** means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, 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 design only if the limitation or the effect it would have on emissions is subject to an elective limit under R18-2-302.01.F. Maximum capacity to emit with elective limits is currently referred to as uncontrolled potential to emit.

**Minor NSR Modification** means any of the following changes that do not qualify as a major source or major modification:

- 1. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
  - a. Increases the potential to emit of a regulated minor NSR pollutant by an amount greater than the permitting exemption thresholds, or
  - b. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than the permitting exemption thresholds.



2. The following do not constitute a physical change or change in the method of operation:
- a. A change consisting solely of the construction of, or changes to, a combination of emissions units qualifying as a categorically exempt activity.
  - b. For a stationary source that is required to obtain a Class II permit under R18-2-302 and that is subject to source-wide emissions caps under R18-2-306.01 or R18-2-306.02, a change that will not result in the violation of the existing emissions cap for that regulated minor NSR pollutant.
  - c. Replacement of an emission unit by a unit with a potential to emit regulated minor NSR pollutants that is less than or equal to the potential to emit of the existing unit, provided the replacement does not cause an increase in emissions at other emission units at the stationary source. A unit installed under this provision is subject to any limits applicable to the unit it replaced.
  - d. Routine maintenance, repair, and replacement.
  - e. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 to 825r.
  - f. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
  - g. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
  - h. Use of an alternative fuel or raw material by a stationary source that either:
    - (1) The source was capable of accommodating before December 12, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of A.A.C R18-2; or
    - (2) The source is approved to use under any permit issued under 40 CFR 52.21, or under Articles 3 or 4 of A.A.C R18-2.
  - i. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
  - j. Any change in ownership at a stationary source
  - k. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
    - (1) The SIP, and
    - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
  - l. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis.



- m. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
3. Construction of one or more new emissions units that have the potential to emit regulated minor NSR pollutants at an amount greater than the permitting exemption threshold.
4. A change constitutes a minor NSR modification regardless of whether there will be a net decrease in total source emissions or a net increase in total source emissions that is less than the permitting exemption threshold as a result of decreases in the potential to emit of other emission units at the same stationary source.
5. For purposes of this subsection:
  - a. "Potential to emit" means the lower of a source's or emission unit's potential to emit or its allowable emissions.
  - b. In determining potential to emit, the fugitive emissions of a stationary source shall not be considered unless the source belongs to a section 302(j) category.
  - c. All of the roadways located at a stationary source constitute a single emissions unit

**Minor Source** means a source of air pollution which is not a major source for the purposes of Article 4 and over which the Director, acting pursuant to A.R.S. § 49-402(B), has asserted jurisdiction.

**Modification or Modify** means a physical change in or change in the method of operation of a source that increases the emissions of any regulated air pollutant emitted by such source by more than any relevant de minimis amount or which results in the emission of any regulated air pollutant not previously emitted by more than such de minimis amount. An increase in emissions at a minor source shall be determined by comparing the source's potential to emit before and after the modification<sup>6</sup>. The following exemptions apply:

1. A physical or operational change does not include routine maintenance, repair or replacement.
2. An increase in the hours of operation or if the production rate is not considered an operational change unless such increase is prohibited under any permit condition that is legally and practically enforceable by the department.
3. A change in ownership at a source is not considered a modification.

**National Ambient Air Quality Standards (NAAQS)** means the ambient air pollutant concentration limits established by the Administrator pursuant to section 109 of the Act.

**Permitting Exemption Thresholds** means the following:

Pollutant	Emissions Rate
PM <sub>2.5</sub> (primary emissions only)	5 tons per year
PM <sub>10</sub>	7.5 tons per year
SO <sub>2</sub>	20 tons per year
NO <sub>x</sub>	20 tons per year

<b>Pollutant</b>	<b>Emissions Rate</b>
VOCs	20 tons per year
CO	50 tons per year
Lead	0.3 tons per year

**Potential to Emit or Potential Emission Rate** means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, 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 design if the limitation or the effect it would have on emissions is legally and practically enforceable by the Department.

**Regulated Air Pollutant** means any of the following:

1. Any conventional air pollutant.
2. Nitrogen oxides and volatile organic compounds.
3. Any air contaminant that is subject to a standard contained in Article 9 of A.A.C. R18-2.
4. Any hazardous air pollutant as defined in Article 17 of A.A.C. R18-2.
5. Any Class I or II substance listed in section 602 of the Clean Air Act.

**Regulated NSR Pollutant** means any of the following:

1. Any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this subsection as a constituent or precursor to such pollutant. Precursors for purposes of NSR are the following:
  - a. Volatile organic compounds and nitrogen oxides are precursors to ozone in all areas.
  - b. Sulfur dioxide is a precursor to PM<sub>2.5</sub> in all areas.
  - c. Nitrogen oxides are precursors to PM<sub>2.5</sub> in all areas.
2. Any pollutant that is subject to any standard promulgated under Article 9 of this A.A.C R18-2.
3. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act as of July 1, 2011.
4. Notwithstanding the above three, the term regulated NSR pollutant shall not include any or all hazardous air pollutants listed under A.A.C. R18-2-1101, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act as of July 1, 2010.
5. Particulate matter emissions, PM<sub>2.5</sub> emissions, and PM<sub>10</sub> emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On and after January 1, 2011, condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for particulate matter, PM<sub>2.5</sub> and PM<sub>10</sub> in permits issued under Article 4.

**Regulated Minor NSR Pollutant** means any pollutant for which a national ambient air quality standard has been



promulgated and the following precursors for such pollutants:

1. VOC and nitrogen oxides as precursors to ozone
2. Nitrogen oxides and sulfur dioxide as precursors to PM<sub>2.5</sub>

**Reasonably Available Control Technology (RACT)** means devices, systems, process modifications, work practices or other apparatus or techniques that are determined by the Director to be reasonably available taking into account:

1. The necessity of imposing the controls in order to attain and maintain a national ambient air quality standard;
2. The social, environmental, energy and economic impact of the controls;
3. Control technology in use by similar sources; and
4. The capital and operating costs and technical feasibility of the controls.

**Responsible Official** means one of the following:

1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - b. The delegation of authority to such representatives is approved in advance by the permitting authority;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
3. For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).
4. For affected sources:
  - a. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and
  - b. The designated representative for any other purposes under 40 CFR 70.

**Significant** means, in reference to a significant emissions increase, a net emissions increase or a stationary source's potential to emit or uncontrolled potential to emit a regulated NSR pollutant:

1. A rate of emissions of conventional pollutants that would equal or exceed any of the following:

Pollutant	Emissions Rate
Carbon monoxide	100 tons per year (tpy)



<b>Pollutant</b>	<b>Emissions Rate</b>
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
PM <sub>10</sub>	15 tpy
PM <sub>2.5</sub>	10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions.
VOCs	40 tpy
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H <sub>2</sub> S)	10 tpy
Total reduced sulfur (including H <sub>2</sub> S)	10 tpy
Reduced sulfur compounds (including H <sub>2</sub> S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5 x 10 <sup>-6</sup> tpy
Municipal waste combustor metals (measured as particulate matter)	15 tpy
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40 tpy
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 tpy
Any regulated NSR pollutant not specifically listed in this above	Any emission rate

2. In ozone nonattainment areas classified as serious or severe, the emission rate for nitrogen oxides or VOC determined under A.A.C. R18-2-405.
3. In a carbon monoxide nonattainment area classified as serious, a rate of emissions that would equal or exceed 50 tons per year, if the Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.

4. Notwithstanding the emission rates listed in 1 and 2 above, for purposes of determining the applicability of A.A.C. R18-2-406, any emissions rate or any net emissions increase associated with a major source or major modification, which would be constructed within 10 kilometers of a Class I area and have an impact on the ambient air quality of such area equal to or greater than  $1 \mu\text{g}/\text{m}^3$  (24-hour average).

**Stationary Source** means any building, structure, facility or installation subject to regulation pursuant to A.R.S. § 49-426(A) which emits or may emit any air pollutant. "Building," "structure," "facility," or "installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" as described in the "Standard Industrial Classification Manual, 1987."

**Trivial activities** means activities and emissions units, such as the following, that may be omitted from a permit or registration application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:

1. Low-Emitting Combustion
  - a. Combustion emissions from propulsion of mobile sources;
  - b. Emergency or backup electrical generators at residential locations;
  - c. Portable electrical generators that can be moved by hand from one location to another. "Moved by hand" means capable of being moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device;
2. Low- Or Non-Emitting Industrial Activities
  - a. Blacksmith forges;
  - b. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, sawing, grinding, turning, routing or machining of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood;
  - c. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
  - d. Drop hammers or hydraulic presses for forging or metalworking;
  - e. Air compressors and pneumatically operated equipment, including hand tools;
  - f. Batteries and battery charging stations, except at battery manufacturing plants;
  - g. Drop hammers or hydraulic presses for forging or metalworking;
  - h. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
  - i. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
  - j. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;

- k. CO2 lasers used only on metals and other materials that do not emit HAP in the process;
- l. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
- m. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
- n. Laser trimmers using dust collection to prevent fugitive emissions;
- o. Process water filtration systems and demineralizers;
- p. Demineralized water tanks and demineralizer vents;
- q. Oxygen scavenging or de-aeration of water;
- r. Ozone generators;
- s. Steam vents and safety relief valves;
- t. Steam leaks; and
- u. Steam cleaning operations and steam sterilizers;
- v. Use of vacuum trucks and high pressure washer/cleaning equipment within the stationary source boundaries for cleanup and insource transfer of liquids and slurried solids to waste water treatment units or conveyances;
- w. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
- x. Electric motors.

### 3. Building and Site Maintenance Activities

- a. Plant and building maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant control requirements;
- b. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;
- c. Janitorial services and consumer use of janitorial products;
- d. Landscaping activities;
- e. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
- f. Sanding of streets and roads to abate traffic hazards caused by ice and snow;
- g. Street and parking lot striping;
- h. Caulking operations which are not part of a production process.

### 4. Incidental, Non-Industrial Activities

- a. Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the Act;
- b. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;



- c. Tobacco smoking rooms and areas;
  - d. Non-commercial food preparation;
  - e. General office activities, such as paper shredding, copying, photographic activities, pencil sharpening and blueprinting, but not including incineration;
  - f. Laundry activities, except for dry-cleaning and steam boilers;
  - g. Bathroom and toilet vent emissions;
  - h. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under subsection (144)(c) of the definition of major source in this Section and any required fugitive dust control plan or its equivalent is submitted with the application;
  - i. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use;
  - j. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
  - k. Circuit breakers;
  - l. Adhesive use which is not related to production.
5. Storage, Piping and Packaging
- a. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
  - b. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
  - c. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
  - d. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
  - e. Storage cabinets for flammable products;
  - f. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
  - g. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
  - h. Sampling and Testing
  - i. Vents from continuous emissions monitors and other analyzers;
  - j. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
  - k. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
  - l. Hydraulic and hydrostatic testing equipment;
  - m. Environmental chambers not using HAP gases;
  - n. Soil gas sampling;

- o. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units;

6. Safety Activities

- a. Fire suppression systems;
- b. Emergency road flares;
- c. Miscellaneous Activities
- d. Shock chambers;
- e. Humidity chambers;
- f. Solar simulators;
- g. Cathodic protection systems;
- h. High voltage induced corona; and
- i. Filter.

# SECTION 4.0 - APPLICATION ADMINISTRATIVE COMPLETENESS CHECKLIST

	REQUIREMENT	MEETS REQUIREMENTS			COMMENT
		YES	NO	N/A	
1	Has the standard application form been completed?	✓			
2	Has the responsible official signed the standard application form?	✓			
3	Has a process description been provided?	✓			
4	Are the facility's emissions documented with all appropriate supporting information?	✓			
5	Is the facility subject to Minor NSR requirements? If the answer is "YES", answer 6a, 6b and 6c as applicable. If the answer is "NO", skip to 7.		✓		
6.a	If the facility chooses to implement RACT, is the RACT determination included for the affected pollutants for all affected emission units?			✓	
6.b	If the facility chooses to demonstrate compliance with NAAQS by screen modeling, is the modeling analysis included?			✓	
6.c	If refined modeling has been conducted, is a comprehensive modeling report along with all modeling files included?			✓	
7	Does the application include an equipment list with the type, name, make, model, serial number, maximum rated capacity, and date of manufacture?	✓			
8	Does the application include an identification and description of Pollution Controls? (if applicable)	✓			
9	For any application component claimed as confidential, are the requirements of AR.S. 49-432 and A.A.C. R18-2-305 addressed?			✓	
10	For any current non-compliance issue, is a compliance schedule attached?			✓	
11	For minor permit revision that will make a modification upon submittal of application, has a suggested draft permit been attached?			✓	
12	For major sources, have all applicable requirements been identified?	✓			
13	For major sources, has a CAM applicability analysis been provided? For CAM applicable units, have CAM plans been provided?			✓	
14	For major sources subject to requirements under Article 4 of the A.A.C., have all necessary New Source Review analyses identified in the application been presented?			✓	



**DRAFT PERMIT #78417**

**PLACE ID #2531**

**PERMITTEE:** Arizona Public Service Company  
**FACILITY:** Fairview Generating Station  
**PERMIT TYPE:** Class I Air Quality Permit  
**DATE ISSUED:** TBD  
**EXPIRY DATE:** TBD

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**SUMMARY**

This operating permit is issued to Arizona Public Service Company (APS), the Permittee, for the continued operation of the Fairview Generating Station, located one mile north of Highway 80 on Sulphur Springs Road in Douglas, Cochise County, Arizona 85607. This is a renewal of Permit #61353.

The uncontrolled NO<sub>x</sub> emissions from the Fairview Generating Station are greater than 100 tons per year. Therefore, a Class I permit is required for the facility.

This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and Title 40 of the Code of Federal Regulations (CFR), except as otherwise defined in this permit.

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**ATTACHMENT "A": GENERAL PROVISIONS**

**I. PERMIT EXPIRATION AND RENEWAL**

- A. This permit is valid for a period of five (5) years from the date of issuance.  
[ARS § 49-426.F, A.A.C. R18-2-306.A.1]
- B. The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.  
[A.A.C. R18-2-304.D.2]

**II. COMPLIANCE WITH PERMIT CONDITIONS**

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.  
[A.A.C. R18-2-306.A.8.a]
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
[A.A.C. R18-2-306.A.8.b]

**III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE**

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
[A.A.C. R18-2-306.A.8.c]
- B. The permit shall be reopened and revised under any of the following circumstances:
1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term;  
[A.A.C. R18-2-321.A.1.a]
  2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit;

[A.A.C. R18-2-321.A.1.b]

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and

[A.A.C. R18-2-321.A.1.c]

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

[A.A.C. R18-2-321.A.1.d]

- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

[A.A.C. R18-2-321.A.2]

#### **IV. POSTING OF PERMIT**

- A. The Permittee shall post this permit or a certificate of permit issuance at the facility in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:

[A.A.C. R18-2-315.A]

1. Current permit number; or
2. Serial number or other equipment identification number (equipment ID number) that is also listed in the permit to identify that piece of equipment.

- B. A copy of the complete permit shall be kept on site.

[A.A.C. R18-2-315.B]

#### **V. FEE PAYMENT**

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.  
[A.A.C. R18-2-306.A.9 and -326]

#### **VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE**

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31<sup>st</sup> or ninety (90) days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

[A.A.C. R18-2-327.A]

- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.B.

[A.A.C. R18-2-327.B]



## VII. COMPLIANCE CERTIFICATION

- A. The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15<sup>th</sup>, and shall report the compliance status of the source during the period between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year. The second certification shall be submitted no later than November 15<sup>th</sup>, and shall report the compliance status of the source during the period between April 1<sup>st</sup> and September 30<sup>th</sup> of the current year.

[A.A.C. R18-2-309.2.a]

- B. The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

[A.A.C. R18-2-309.2.c.i]

2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,

[A.A.C. R18-2-309.2.c.ii]

3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XI.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification;

[A.A.C. R18-2-309.2.c.iii]

4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;

[A.A.C. R18-2-309.2.c.iii]

5. Other facts the Director may require to determine the compliance status of the source.

[A.A.C. R18-2-309.2.c.iv]

- C. A copy of all compliance certifications shall also be submitted to the EPA Administrator.

[A.A.C. R18-2-309.2.d]

- D. If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above. The progress reports shall contain the information required by A.A.C R18-2-309.5.d.

[A.A.C. R18-2-309.5.d]

## VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.



## **IX. INSPECTION AND ENTRY**

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;  
[A.A.C. R18-2-309.4.a]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;  
[A.A.C. R18-2-309.4.b]
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;  
[A.A.C. R18-2-309.4.c]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and  
[A.A.C. R18-2-309.4.d]
- E. Record any inspection by use of written, electronic, magnetic and photographic media.  
[A.A.C. R18-2-309.4.e]

## **X. ACCIDENTAL RELEASE PROGRAM**

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

[40 CFR Part 68]

## **XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING**

- A. Excess Emissions Reporting  
[A.A.C. R18-2-310.01.A, B, and C]
  - 1. Excess emissions shall be reported as follows:
    - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
      - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b below.
      - (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a(1) above.

[A.A.C. R18-2-310.01.A]

b. The report shall contain the following information:

- (1) Identity of each stack or other emission point where the excess emissions occurred;  
[A.A.C. R18-2-310.01.B.1]
- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;  
[A.A.C. R18-2-310.01.B.2]
- (3) Time and duration, or expected duration, of the excess emissions;  
[A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated;  
[A.A.C. R18-2-310.01.B.4]
- (5) Nature and cause of such emissions;  
[A.A.C. R18-2-310.01.B.5]
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;  
[A.A.C. R18-2-310.01.B.6]
- (7) Steps that were or are being taken to limit the excess emissions; and  
[A.A.C. R18-2-310.01.B.7]
- (8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.  
[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XI.A.1 above.  
[A.A.C. R18-2-310.01.C]

**B. Permit Deviations Reporting**

The Permittee shall promptly report 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. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable



requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XI.A.1 above is prompt for deviations that constitute excess emissions;  
[A.A.C. R18-2-306.A.5.b.i]
2. Except as provided in Conditions XI.B.1 above, prompt notification of all other types of deviations shall be every 6-months, concurrent with the semi-annual compliance certifications required in Section VII, and can be submitted via the "Annual/Semiannual Deviation Monitoring Report" form available on the Arizona Department of Environmental Quality Website.  
[A.A.C. R18-2-306.A.5.b.ii]

**C. Emergency Provision**

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require 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 preventative maintenance, careless or improper operation, or operator error.  
[A.A.C. R18-2-306.E.1]
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if Condition XI.C.3 below is met.  
[A.A.C. R18-2-306.E.2]
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:  
[A.A.C. R18-2-306.E.3]
  - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;  
[A.A.C. R18-2-306.E.3.a]
  - b. The permitted facility was being properly operated at the time of the emergency;  
[A.A.C. R18-2-306.E.3.b]
  - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and  
[A.A.C. R18-2-306.E.3.c]
  - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.



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

[A.A.C. R18-2-306.E.4]

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

[A.A.C. R18-2-306.E.5]

**D. Compliance Schedule**

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

[ARS § 49-426.I.3]

**E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown**

**1. Applicability**

A.A.C. R18-2-310 establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;  
[A.A.C. R18-2-310.A.1]
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;  
[A.A.C. R18-2-310.A.2]
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;  
[A.A.C. R18-2-310.A.3]
- d. Contained in A.A.C. R18-2-715.F; or  
[A.A.C. R18-2-310.A.4]
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.  
[A.A.C. R18-2-310.A.5]

**2. Affirmative Defense for Malfunctions**

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.B]

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;  
[A.A.C. R18-2-310.B.1]
  - b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;  
[A.A.C. R18-2-310.B.2]
  - c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;  
[A.A.C. R18-2-310.B.3]
  - d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;  
[A.A.C. R18-2-310.B.4]
  - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;  
[A.A.C. R18-2-310.B.5]
  - f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;  
[A.A.C. R18-2-310.B.6]
  - g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;  
[A.A.C. R18-2-310.B.7]
  - h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;  
[A.A.C. R18-2-310.B.8]
  - i. All emissions monitoring systems were kept in operation if at all practicable; and  
[A.A.C. R18-2-310.B.9]
  - j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.  
[A.A.C. R18-2-310.B.10]
3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XI.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

[A.A.C. R18-2-310.C.1]

- (1) The excess emissions could not have been prevented through careful and prudent planning and design;

[A.A.C. R18-2-310.C.1.a]

- (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

[A.A.C. R18-2-310.C.1.b]

- (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

[A.A.C. R18-2-310.C.1.c]

- (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

[A.A.C. R18-2-310.C.1.d]

- (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

[A.A.C. R18-2-310.C.1.e]

- (6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

[A.A.C. R18-2-310.C.1.f]

- (7) All emissions monitoring systems were kept in operation if at all practicable; and

[A.A.C. R18-2-310.C.1.g]

- (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

[A.A.C. R18-2-310.C.1.h]

- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XI.E.2 above.

[A.A.C. R18-2-310.C.2]



4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XI.E.2 above.

[A.A.C. R18-2-310.D]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XI.E.2 or XI.E.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XI.E and Condition XI.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

[A.A.C. R18-2-310.E]

## **XII. RECORDKEEPING REQUIREMENTS**

**A.** The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

[A.A.C. R18-2-306.A.4.a]

1. The date, place as defined in the permit, and time of sampling or measurements;  
[A.A.C. R18-2-306.A.4.a.i]

2. The date(s) any analyses were performed;  
[A.A.C. R18-2-306.A.4.a.ii]

3. The name of the company or entity that performed the analyses;  
[A.A.C. R18-2-306.A.4.a.iii]

4. A description of the analytical techniques or methods used;  
[A.A.C. R18-2-306.A.4.a.iv]

5. The results of analyses; and  
[A.A.C. R18-2-306.A.4.a.v]

6. The operating conditions as existing at the time of sampling or measurement.  
[A.A.C. R18-2-306.A.4.a.vi]

**B.** The Permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[A.A.C. R18-2-306.A.4.b]

## **XIII. REPORTING REQUIREMENTS**

The Permittee shall submit the following reports:

**A.** Compliance certifications in accordance with Section VII above.

[A.A.C. R18-2-306.A.5.a]

- B. Excess emission; permit deviation, and emergency reports in accordance with Section XI above.

[A.A.C. R18-2-306.A.5.b]

- C. Other reports required by any condition of Attachment "B".

#### **XIV. DUTY TO PROVIDE INFORMATION**

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

[A.A.C. R18-2-304.G and -306.A.8.e]

- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

[A.A.C. R18-2-304.H]

#### **XV. PERMIT AMENDMENT OR REVISION**

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI below, as follows:

- A. Administrative Permit Amendment;

[A.A.C. R18-2-318]

- B. Minor Permit Revision; and

[A.A.C. R18-2-319]

- C. Significant Permit Revision

[A.A.C. R18-2-320]

- D. The applicability and requirements for such action are defined in the above referenced regulations.

#### **XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION**

- A. The Permittee may make changes that contravene an express permit term without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(24);

[A.A.C. R18-2-317.A.1]

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;

[A.A.C. R18-2-317.A.2]

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;  
[A.A.C. R18-2-317.A.3]
  4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A;  
[A.A.C. R18-2-317.A.4]
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements; and  
[A.A.C. R18-2-317.A.5]
  6. The changes do not constitute a minor NSR modification.  
[A.A.C. R18-2-317.A.6]
- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVI.A, C, and D of this Attachment.  
[A.A.C. R18-2-317.B]
- C.** For each change under Conditions XVI.A and XVI.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.  
[A.A.C. R18-2-317.D]
- D.** Each notification shall include:
1. When the proposed change will occur;  
[A.A.C. R18-2-317.E.1]
  2. A description of the change;  
[A.A.C. R18-2-317.E.2]
  3. Any change in emissions of regulated air pollutants; and  
[A.A.C. R18-2-317.E.3]
  4. Any permit term or condition that is no longer applicable as a result of the change.  
[A.A.C. R18-2-317.E.7]
- E.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section XVI.  
[A.A.C. R18-2-317.F]
- F.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section XVI.  
[A.A.C. R18-2-317.G]



- G. Notwithstanding any other part of Section XVI, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under Section XVI over the term of the permit, do not satisfy Condition XVI.A above.

[A.A.C. R18-2-317.H]

## **XVII. TESTING REQUIREMENTS**

- A. Except as provided in Condition XVII.F below, the Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

[A.A.C. R18-2-312.A]

- B. Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[A.A.C. R18-2-312.C]

- C. Performance Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

[A.A.C. R18-2-312.B]

- D. Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

[A.A.C. R18-2-312.B]

1. Test duration;
2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

- E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

[A.A.C. R18-2-312.E]

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);

3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

**F. Interpretation of Final Results**

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the 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 is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-312.F]

**G. Report of Final Test Results**

A written report of the results of performance tests conducted pursuant to 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the completion of the testing as specified in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

[A.A.C. R18-2-312.A and B]

**H. Extension of Performance Test Deadline**

For performance testing required under Condition XVII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

[A.A.C. R18-2-312.J]

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the

regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.

[A.A.C. R18-2-312.J.2]

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVII.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVII.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVII, a "force majeure event" means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

## **XVIII. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

[A.A.C. R18-2-306.A.8.d]

## **XIX. SEVERABILITY CLAUSE**

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

[A.A.C. R18-2-306.A.7]

## **XX. PERMIT SHIELD**

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XV.B of this Attachment and any facility changes without a permit revision pursuant to Condition XVI of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

## **XXI. PROTECTION OF STRATOSPHERIC OZONE**

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

[40 CFR Part 82]

## **XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS**



For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulations.

[40 CFR Part 60 Subpart A and Part 63 Subpart A]

**ATTACHMENT "B": SPECIFIC CONDITIONS**

**I. FACILITY-WIDE REQUIREMENTS**

**A. Opacity**

**1. Instantaneous Surveys and Six-Minute Observations**

**a. Instantaneous Surveys**

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions I.A.1.a(1) and (2):

[A.A.C. R18-2-311.b]

**(1) Alternative Method ALT-082 (Digital Camera Operating Technique)**

**(a)** The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

**(b)** The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

**(2) EPA Reference Method 9 Certified Observer.**

[A.A.C. R18-2-306.A.3.c]

**b. Six-Minute Observations**

Any six-minute observation required by this permit shall be determined by either option listed in Conditions I.A.1.b(1) and (2):

[A.A.C. R18-2-311.b]

**(1) Alternative Method ALT-082 (Digital Camera Operating Technique)**

**(a)** The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

**(b)** The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

**(2) EPA Reference Method 9.**

**c.** The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all 6-minute Method 9 observations required by this permit are conducted as a 6-minute Alternative Method-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous Alt-082 camera survey. Any 6-minute Method 9 observation required by this permit can be conducted as a 6-minute Alternative Method-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous Alt-082 camera survey.

2. Monitoring, Recordkeeping, and Reporting Requirements

[A.A.C. R18-2-306.A.3.c]

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
  - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
  - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
    - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
    - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
    - (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
    - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

B. Monitoring, Recordkeeping and Reporting Requirements

1. The Permittee shall maintain, on-site, records of the manufacturer's specifications or Operation and Maintenance Plan for minimizing emissions for all process equipment listed in Attachment "C".

[A.A.C. R18-2-306.A.4]
2. The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII



of Attachment "A." All instances of deviations from the requirements of the Permit shall be clearly identified in the reports.

[A.A.C. R18-2-306.A.5]

## II. SIMPLE CYCLE COMBUSTION TURBINE AND BLACK START ENGINE

### A. Applicability

This Section applies to both the simple cycle combustion turbine and the black start engine listed in the Equipment List, Attachment "C".

### B. Voluntarily Accepted Limitations

#### 1. Fuel Limitation

The Permittee shall only combust #2 diesel fuel with sulfur content less than or equal to 0.05 percent in the simple cycle combustion turbine and the black start engine.

[A.A.C. R18-2-306.A.2]

#### 2. Monitoring and Recordkeeping Requirements

The Permittee shall maintain a 12-month rolling total of the hours that the simple cycle combustion turbine is operated.

[A.A.C. R18-2-306.A.3.c]

### C. Particulate Matter and Opacity

#### 1. Emission Limitations

##### a. Particulate Matter

The Permittee shall not emit or cause to be emitted into the atmosphere gases containing particulate matter in excess of the amount calculated by the following equation:

$$E = 1.02 Q^{0.769}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

[A.A.C. R18-2-719.C.1]

For the purposes of this condition, heat input is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

[A.A.C. R18-2-719.B]

b. Opacity

The Permittee shall not emit or cause to be emitted into the atmosphere gases exhibiting opacity greater than 40 percent for any period greater than 10 consecutive seconds. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

[A.A.C. R18-2-719.E]

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall record the lower heating value of the #2 diesel fuel being fired in the simple cycle combustion turbine and the black start engine.

[A.A.C. R18-2-719.I]

b. Opacity Monitoring

(1) Simple Cycle Combustion Turbine

[A.A.C. R18-2-306.A.3.c]

For each 80 hours that the simple cycle combustion turbine operates, the Permittee shall conduct an instantaneous survey in accordance with Condition I.A while operating at normal representative working conditions.

(2) Black Start Engine

- (a) If the black start engine is in operation at the time the instantaneous survey is required by Condition II.C.2.b(1) for the simple cycle combustion turbine, then the Permittee shall also conduct an instantaneous survey on the black start engine in accordance to Condition I.A while operating at normal representative working conditions.

- (b) If the black start engine is not in operation at the time the instantaneous survey is required by Condition II.C.2.b(1) for the simple cycle combustion turbine, then the Permittee does not have to set the black start engine in operation to conduct an instantaneous survey. Instead, the Permittee shall document that the black start engine was not in operation at the time the instantaneous survey was required for the simple cycle combustion turbine.

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C.R18-2-719.C.1, E, and I.

[A.A.C. R18-2-325]

**D. Nitrogen Oxide**

**1. Simple Cycle Combustion Turbine Testing**

The Permittee shall conduct or cause to be conducted, a one-time during permit term performance test for nitrogen oxide (NO<sub>x</sub>), after the 12-month rolling total hours of operation exceeds 1,103 hours.

- a. The performance test shall be conducted within 90 days after the 12-month rolling total hours of operation exceed 1,103 hours.

[Arizona Testing Manual For Air Pollutant Emissions – Section 1.0 and A.A.C. R18-2-312]

- b. The performance test for NO<sub>x</sub> shall be conducted in accordance with EPA Referenced Method 7E described in 40 CFR 60, Appendix A.

[A.A.C. R18-2-312]

- c. If the 12-month rolling total hours of operation does not exceed 1,103 hours during the permit term, then no performance test is required during the permit term.

[Arizona Testing Manual For Air Pollutant Emissions – Section 1.0 and A.A.C. R18-2-312]

**E. Sulfur Dioxide**

**1. Emission Limitation**

The Permittee shall not emit or cause to be emitted into the atmosphere any gases containing sulfur dioxide in excess of 1.0 pound per million Btu heat input.

[A.A.C. R18-2-719.F]

**2. Monitoring and Recordkeeping Requirements**

- a. While the facility is in operation, the Permittee shall record daily the sulfur content of the fuel (sulfur weight percent) being fired in the simple cycle combustion turbine and the black start engine.

[A.A.C. R18-2-719.I]

- b. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the simple cycle combustion turbine or the black start engine exceeds 0.8 percent.

[A.A.C. R18-2-719.J]

- c. The Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include:

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-719.K.2]

- (1) The sulfur content of #2 diesel fuel (sulfur weight percent); and

- (2) The method used to determine the sulfur content of #2 diesel fuel.

**3. Permit Shield**

Compliance with the conditions of this Section shall be deemed compliance with A.A.C.R18-2-719.F, I, J, and K.2.



**F. Hazardous Air Pollutants**

**1. Applicability**

This Section applies to the black start engine identified in the Equipment List, Attachment "C".

[40 CFR 63.6590(a)(1)(iii)]

**2. Operating Limitations**

- a. The Permittee shall operate and maintain the black start engine according to either the manufacturer's emission-related written instructions or the Permittee developed maintenance plan which provides to the extent practicable, the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

- b. The Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h)]

- c. The Permittee shall comply with the following operating limitations at all times:

[40 CFR 63.6603(a), -6605(a); and Table 2d, Item 4.a,b,and c]

- (1) The Permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first.
- (2) The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- (3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

- d. If the Permittee prefers to extend the oil change requirements specified in Condition II.F.2.c(1) above, an oil analysis program shall be performed. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (1) Total Base Number- changed less than 30 percent of Total Base Number of oil when new;
- (2) Viscosity- changed more than 20 percent from the viscosity of oil when new;
- (3) Water Content- changed more than 0.5 percent by volume.

If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the operation of the engine.

[40 CFR 63.6625(i)]

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 63.6590(a)(1)(iii); -6603(a); -6605(a); -6625(e), (h), and (i); and Table 2d, Items 4.a, b, and c, of Subpart ZZZZ.

[A.A.C. R18-2-325]

### III. EMERGENCY INTERNAL COMBUSTION ENGINE

A. Applicability

This Section applies to the emergency internal combustion engine (ICE) marked as NSPS applicable in the Equipment List, Attachment "C".

B. Fuel Limitations

The Permittee shall use diesel fuel that meets the requirements of non-road diesel fuel listed in 40 CFR 80.510(b) as listed below:

1. Sulfur content: 15 ppm maximum; and
2. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

C. Emission Limitation and Standards

The Permittee shall comply with the emission standards listed in the table below:

Engine Power	NO <sub>x</sub> + HC	CO	PM
	g/kWH-hr		
75 ≤ KW <130 (100 ≤ HP <175)	4.0	5.0	0.3

[40 CFR 60.4205(b)]

D. Operating Requirements

1. *The Permittee shall install a non-resettable hour meter prior to startup of the engine.*

[40 CFR 60.4209(a), A.A.C. R18-2-306.A.3, and -331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]

2. Operation of the ICE other than for emergency operation, maintenance and testing, and operation in non-emergency situations for more than 50 hours per year, is prohibited. These 50 hours of operation shall be counted towards the 100 hours per year provided for maintenance and testing in Condition III.D.7.  
[40 CFR 60.4211(f)]
3. There is no time limit on the use of emergency ICE in emergency situations.  
[40 CFR 60.4211(f)(1)]
4. The Permittee shall operate and maintain the ICE and the control device according to the manufacturer's written instructions. A copy of the instructions or procedures shall be kept onsite and made available to ADEQ upon request.  
[40 CFR 60.4211(a)(1) and A.A.C. R18-2-306.A.3]
5. The Permittee shall only change those emission related settings that are permitted by the manufacturer.  
[40 CFR 60.4211(a)(2)]
6. The Permittee shall meet the applicable requirements of 40 CFR Part 89, 94 and 1068.  
[40 CFR 60.4211(a)(3)]
7. The Permittee may operate the stationary ICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.  
[40 CFR 60.4211 (f)(2)(i)]

**E. Compliance Requirements**

1. The Permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.  
[40 CFR 60.4211 (c)]
2. If the Permittee does not install, configure, operate, and maintain the ICE and control device according to the manufacturer's emission-related written instructions, or change the emission-related setting in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one (1) year of startup, or within one (1) year after changing any non-permitted emission-related setting.



**F. Recordkeeping and Reporting Requirements**

1. The Permittee shall maintain a copy of the engine certification or other documentation demonstrating that the engine complies with the applicable standards in this permit, and shall make the documentation available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c]

2. The Permittee shall record the time of operation and the reason the engine was in operation during that time.

[40 CFR 60.4214(b)]

3. The Permittee shall keep records of the fuel supplier specifications. Each specification shall contain the name of the supplier, the sulfur content in the fuel, and either the cetane index or the aromatic content in the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R 18-2-306.A.3.c]

**G. Permit Shield**

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4205(b); -4207(b); -4209(a); -4211(a)(1), (2) and (3), (c), (e), (f), (f)(1), (f)(2)(i), (g), and (g)(2); and -4214(b).

[A.A.C. R18-2-325]

**IV. DIESEL STORAGE TANK**

**A. Applicability**

This Section applies to the diesel storage tank listed in the Equipment List, Attachment "C".

**B. Volatile Organic Compounds (VOCs)**

**1. Emission Limitation/Standards**

- a. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under the Permittee's control in such quantities or concentrations as to cause air pollution.

[A.A.C. R18-2-730.D]

- b. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

**2. Permit Shield**

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-730.D and G.

[A.A.C. R18-2-325]

**V. FUGITIVE DUST REQUIREMENTS**

**A. Applicability**

This Section applies to any non-point source of fugitive dust in the facility.

**B. Particulate Matter and Opacity**

Open Areas; Roadways and Streets; Storage Piles; and Material Handling

**1. Emission Limitations and Standards**

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40 percent opacity.

[A.A.C. R18-2-614]

- b. Opacity of emission from any fugitive dust point source shall not be greater than 20 percent opacity.

[A.A.C. R18-2-702.B.3]

- c. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

- (1) For a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, keep dust and other types of air contaminants to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

- (2) Keep dust to a minimum from vacant lots or an urban or suburban open area where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

- (3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway or alley is used, repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

- (4) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust;

[A.A.C. R18-2-605.B]

- (5) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits; and

[A.A.C. R18-2-606]

- (6) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition V.B.1.c were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]

- b. Opacity Monitoring Requirements

Each quarter, the Permittee shall monitor visible emissions from fugitive sources in accordance with Condition I.A.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-604, -605, -606, 607, -608, -614, and -804.B.

[A.A.C. R18-2-325]

VI. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

- a. Emission Limitations/Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

[A.A.C. R18-2-726]

- (1) Wet blasting;



- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

[A.A.C. R18-2-306.A.3.c]

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

3. Permit Shield

Compliance with Condition VI.A.1 shall be deemed compliance with A.A.C. R18-2-702.B.3 and -726.

[A.A.C. R18-2-325]

**B. Use of Paints**

1. Volatile Organic Compounds

a. Emission Limitations/Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C. R18-2-727.A]

- (2) The Permittee or their designated contractor shall not either:

[A.A.C. R18-2-727.B]

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

- (b) Thin or dilute any architectural coating with a photochemically reactive solvent.
- (3) For the purposes of Condition VI.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition VI.B.1.a(3), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:  
[A.A.C. R18-2-727.C]
  - (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
  - (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
  - (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
- (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition VI.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.  
[A.A.C. R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

[A.A.C. R18-2-306.A.3.c]

- (1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:
  - (a) The date the project was conducted;
  - (b) The duration of the project;
  - (c) Type of control measures employed;
  - (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
  - (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VI.B.1.b(1).

c. Permit Shield

Compliance with Condition VI.B.1.a shall be deemed compliance with A.A.C.R18-2-727.

[A.A.C. R18-2-325]

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

b. Permit Shield

Compliance with Condition VI.B.2.a shall be deemed compliance with A.A.C.R18-2-702.B.3.

[A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with Condition VI.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

[A.A.C. R18-2-325]



**ATTACHMENT "C": EQUIPMENT LIST**

<b>EQUIPMENT TYPE</b>	<b>MAX. CAPACITY</b>	<b>MAKE</b>	<b>MODEL</b>	<b>SERIAL NUMBER</b>	<b>DATE OF MFG.</b>	<b>NSPS/NESHAP APPLICABLE</b>
Simple Cycle Combustion Turbine	20.95 MW	General Electric	Company Frame 5	214472	March 31, 1972	No
Black Start Diesel Engine	500 hp	Detroit	Diesel N 71237000	12VA026309	March 31, 1972	Yes, NESHAP Subpart ZZZZ
Emergency Internal Combustion Engine	157 HP	Caterpillar	C4.4 DIT	TBD	2014	Yes, NSPS Subpart IIII
Diesel Fuel Oil Storage Tank 1	84,000 gallons	NA	NA	NA	March 31, 1972	No



**TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT No. 78417**

**I. INTRODUCTION**

This Class I operating permit renewal is for the continued operation of the APS Fairview Generating Station, which is located at Sulphur Springs and Lawrence in the City of Douglas. Permit #78417 renews and supersedes Permit #61353.

**A. Company Information**

Facility Name: Fairview Generating Station

Mailing Address: 400 North 5<sup>th</sup> Street, MS 9303  
Phoenix, AZ 85004

Facility Location: Sulphur Springs and Lawrence  
Douglas, Cochise County, AZ 85607

**B. Attainment Classification**

Fairview Generating Station is located in an area that is non-attainment for PM<sub>10</sub> and in maintenance for SO<sub>2</sub>. The area is in attainment for all other criteria pollutants.

**II. PROCESS DESCRIPTION**

The Fairview Generating Station is a peaking plant and is operated on as-needed basis. The facility consist of a 20.95 MW simple cycle combustion turbine, a 500 horsepower (hp) black start engine which supplies power to the turbine for start-up, and a 157 hp emergency generator. The turbine, the black start engine, and the emergency generator all burn only #2 diesel fuel.

The #2 diesel fuel is delivered to the station by trucks and is kept in a storage tank with a total capacity of 84,000 gallons.

**III. COMPLIANCE HISTORY**

Permit No. 61353 was issued on March 19, 2015. Since the issuance of the permit, three (3) inspections were conducted of the facility and nine (9) semi-annual compliance certifications were reviewed. The facility was found to be in compliance with all permit conditions. Therefore, no air quality cases or violations were issued during the permit term.

**IV. EMISSIONS**

There have been no changes at the facility, and as such, the facility wide potential-to-emit provided in Table 1 remains unchanged.

**Table 1: Potential to Emit**

<b>Pollutant</b>	<b>Emissions (tons per year)</b>
NO <sub>x</sub>	795.30
PM <sub>10</sub>	15.60
PM <sub>2.5</sub>	15.60
CO	5.37
SO <sub>2</sub>	69.53
VOC	0.53
Pb	0.02
HAPs (total)	1.44

**V. APPLICABLE REGULATIONS**

Table 2 identifies applicable regulations and verification as to why that standard applies.

**Table 2: Applicable Regulations**

<b>Unit &amp; year</b>	<b>Control Device</b>	<b>Rule</b>	<b>Discussion</b>
Combustion Turbine 1972	None	A.A.C. R18-2-719	The turbine was installed on March 31, 1972. The requirements of NSPS Subpart GG are applicable to turbines installed or reconstructed after October 3, 1977. This turbine has not been modified or reconstructed since 1972. Therefore NSPS Subpart GG is not applicable.
Black Start Engine 1972	None	NESHAP 40 CFR 63 Subpart ZZZZ	The requirements of NESHAP 40 CFR 63 Subpart ZZZZ are applicable to the black start engine.
Emergency Generator 2014	None	NSPS, 40 CFR Subpart IIII	The requirements of NSPS 40 CFR 60 Subpart IIII are applicable to the emergency generator.
Diesel Storage Tank	None	A.A.C. R18-2-730	This rule for unclassified sources applies to the diesel storage tank.
Fugitive Dust Sources	Water Trucks and Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2-702	These standards apply to all fugitive dust sources at the facility.



Unit & year	Control Device	Rule	Discussion
Abrasive Blasting	Wet Blasting; Dust Collecting Equipment; and Other Approved Methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards apply to abrasive blasting operations.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	These standards apply to spray painting operations.
Demolition/Renovation Operations	N/A	A.A.C. R18-2-1101.A.8	This standard applies to asbestos related demolition or renovation operations.

## VI. PREVIOUS PERMIT AND CONDITIONS

### A. Previous Permit Conditions

Table 3 compares the sections in Permit #61353 with the conditions in this renewal permit:

**Table 3: Previous Permit Conditions**

Section No.	Determination		Comments
	Revised	Deleted	
Att. "A"	X		General Provisions: Revised to represent the most recent template language.
Att. "B" Section I	X		Facility wide requirements: Revised to represent the most recent opacity template language
Att. "B" Section II	X		Simple Cycle Combustion Turbine and Black Start Engine: Revised to clarify NOx testing requirements
Att. "B" Section V	X		Fugitive Dust Requirements: Visible emission monitoring was reduced from monthly to quarterly.
Att. "B" Section VII		X	Mobile Source Requirements

## VII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

### A. Facility Wide

1. The Permittee is required to maintain, on-site, records of the manufacturer's specifications or Operation and Maintenance Plan for minimizing emissions for all process equipment.
2. Along with the semiannual compliance certification, the Permittee is required to submit reports of all recordkeeping, monitoring, and maintenance required by the permit.

**B. Simple Cycle Combustion Turbine and Black Start Engine**

1. The Permittee is required to maintain a 12-month rolling total of the hours that the simple cycle combustion turbine is operated.
2. The opacity of the emissions from the stack of simple cycle combustion turbine will be monitored every 80 hours of operation. If the black start engine is operating at the time the emissions from the turbine is monitored, then the emissions from the black start engine is also required to be monitored.
3. If the opacity survey appears to exceed the standard, then the Permittee is required to conduct a certified EPA Reference Method 9 observation. The Permittee is required to keep records of the initial opacity survey and any EPA Reference Method 9 observation performed. These records must include the type of observation performed, emission point observed, name of observer, date and time of observation and the result of the observation.
4. The Permittee is required to maintain a copy of the fuel oil purchase specification sheet for the #2 diesel fuel oil combusted in the engines. The specification is required to include: the lower heating value, the sulfur content, and the method used to determine the sulfur content.

**C. Emergency Internal Combustion Engine**

1. The Permittee is required to maintain a copy of the engine certification or other documentation demonstrating that the engine complies with the applicable standards in this permit.
2. The Permittee is required to record the time of operation and the reason the engine was in operation during that time.
3. The Permittee is required to keep records of the fuel supplier specifications. Each specification is required to include: the name of the supplier, the sulfur content in the fuel, and either the cetane index or the aromatic content in the fuel.

**D. Fugitive Dust**

1. The Permittee is required to keep records of the date(s) and specific dust control measure(s) employed.

2. The Permittee is required to demonstrate compliance with the opacity standards by having a Method 9 certified observer perform a quarterly survey of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
4. The Permittee is required to keep records of the corrective action(s) taken to lower the opacity of an emission source along with all excess emission reports.

**E. Periodic Activities**

1. The Permittee is required to record the date, duration, and the pollution control measure(s) for all abrasive blasting projects.
2. The Permittee is required to record the date, duration, quantity of paint used, any applicable SDS, and pollution control measure(s) of all spray painting projects.
3. The Permittee is required to maintain records for all asbestos related demolition(s) and renovation project(s). The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

**VIII. TESTING REQUIREMENTS**

The Permittee is required to conduct a one time during permit term performance test on the turbine for nitrogen oxide if the 12-month rolling total hours of operation exceeds 1,103 hours. The Arizona Testing Manual requires that all major emissions points be tested during the permit term. Since NO<sub>x</sub> is the only pollutant for which PTE exceeds 100 tons per year, NO<sub>x</sub> is the only pollutant for which testing is required. Turbine operation at 1,103 hours equates to the 100 tons NO<sub>x</sub> and is therefore the hours of operation that trigger the one time during permit term requirement for testing.

**IX. COMPLIANCE ASSURANCE MONITORING (CAM) (40 CFR 64)**

The simple cycle combustion turbine does not have any add-on emissions controls. Therefore, CAM does not apply as CAM only applies to emission units with an add-on control device.

**X. LIST OF ABBREVIATIONS**

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
hp	Horsepower
MW	Mega Watt
NO <sub>x</sub>	Nitrogen Oxides



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Pb ..... Lead  
PM<sub>2.5</sub> ..... Particulate Matter Nominally less than 2.5 Micrometers  
PM<sub>10</sub> ..... Particulate Matter Nominally less than 10 Micrometers  
SO<sub>2</sub> ..... Sulfur Dioxide  
VOC ..... Volatile Organic Compound