

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

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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:

<http://www.azdeq.gov/environ/air/permits/permitapplications.html>

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

1.3 ADEQ TIMEFRAME FOR ADMINISTRATIVE COMPLETENESS REVIEW

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

1.4 ADEQ TIMEFRAME FOR PROCESSING CLASS I PERMITS

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

1.5 Fee Rule Summary – Effective November 1, 2018

Application and Processing Fees

Individual Permits

Individual Permit Initial Application Fee	None
Individual Permit Processing Fee (per hour)	\$162.40
Accelerated Permit Deposit	\$15,000
Administrative Amendments and Permit Transfers	None

General Permits

General Permit Application Fee	\$500
Additional ATO Fee	\$500

Registration Application and Processing Fees None

Annual Fees – Class I and Class II Synthetic Minor

Emission Based Fee (Class I only) \$46.54/ton

Annual Administrative Fee (Class I and Title V Synthetic Minor Stationary Sources)

Aerospace	\$25,310	Paper Coaters.....	\$18,830
Air Curtain Destructors	\$910	Petroleum Products Terminals	\$27,660
Cement Plants	\$77,490	Polymeric Fabric Coaters	\$24,920
Combustion/Boilers	\$18,830	Reinforced Plastics	\$18,830
Compressor Stations	\$15,490	Semiconductors Fabrication	\$32,770
Electronics	\$24,930	Copper Smelters	\$77,490
Expandable Foam.....	\$17,860	Utilities - Fossil Fuel Fired Except Coal	\$20,000
Foundries	\$23,750	Utilities - Coal Fired.....	\$39,630
Landfills	\$19,420	Vitamin/Pharmaceutical	\$19,220
Lime Plants	\$73,200	Wood Furniture.....	\$18,830
Copper & Nickel Plants	\$18,250	Others	\$24,930
Gold Mines	\$18,250	Others with Continuous Emission	\$24,930
Mobile Home Manufacturing	\$18,040		
Paper Mills	\$24,920		

Annual Administrative Fee (Non-Title V Synthetic Minor Stationary Sources) \$6,360

Annual Administrative Fee (Synthetic Minor Portable Sources) \$9,820

Annual Fees – Class II True Minor and Registrations

Title V

Individual Permit - Stationary Source	\$9,820
Individual Permit - Portable Source	\$9,820
General Permit.....	\$4,520

Non-Title V

Individual Permit - Stationary Source	\$6,360
Individual Permit - Portable Source	\$6,360
General Permit.....	\$3,020

Registrations None

Non-Title V vs. Title V status for the purpose of annual fees depends on the applicability of various federal regulations. Contact the Air Permits Unit at (602) 771-2338 for assistance in determining a facility's status.

SECTION 2.0

CLASS I PERMIT APPLICATION PACKAGE

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):
Yuma Cogeneration Associates
2. Mailing Address: 280 N 27th Dr
City: Yuma State: Arizona ZIP: 85364
3. Name (or names) of Owners/ Principals: California Energy Development Corporation
Phone: 928 236-8150 Fax: 928 329-6015 Email: lawrence.ornellas@calenergy.com
4. Name of Owner's Agent: _____
Phone: _____ Fax: _____ Email: _____
5. Plant/Site Manager/ Contact Person and Title: Lawrence Ornellas
Phone: 928 236-8150 Fax: 928 329-6015 Email: lawrence.ornellas@calenergy.com
6. Plant Site Name: Yuma Cogeneration Associates
7. Plant Site Location Address: 280 N 27th Dr
City: Yuma County: Yuma Zip Code: 85364
Indian Reservation (if applicable, which one): N/A
Latitude/ Longitude, Elevation: 32.728936, -114.654030, 130 feet elevation
Section/ Township/ Range: _____
8. General Nature of Business: A natural gas fired combustion turbine is used for the purpose of 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): 84154 December 29, 2025
Date of Commencement of Construction or Modification: N/A
Primary Standard Industrial Classification Code: 4911
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: Lawrence Ornellas

Official Title of Signer: General Manager

Typed or Printed Name of Signer: Lawrence Ornellas

Date: 5/15/25 Telephone Number: 928 236-8150

SECTION 2.2 - EMISSION SOURCES

PAGE 1 OF 3

DATE 8/6/2020

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.

REGULATED AIR POLLUTANT DATA					EMISSION POINT DISCHARGE PARAMETERS									
EMISSION POINT [1]		CHEMICAL COMPOSITION OF TOTAL STREAM	AIR POLLUTANT EMISSION RATE		UTM COORDINATES OF EMISSION POINT [5]			STACK SOURCES [6]				NONPOINT		
NUMBER	NAME	REGULATED AIR POLLUTANT NAME [2]	#/ HR. [3]	TONS/ YEAR [4]	ZONE	EAST (Mtrs)	NORTH (Mtrs)	HEIGHT ABOVE GROUND (feet)	HEIGHT ABOVE STRUC. (feet)	EXIT DATA			SOURCES [7]	
										DIA (ft.)	VEL. (fps)	TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)
001	CTG/Duct Burners/HRSG	Carbon Monoxide (CO)	17.88	78.33	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Nitrogen Oxides (NOx)	52.33	229.19	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Particulate Matter Condensable	2.48	10.86	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Particulate Matter Filterable	0.98	4.31	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Particulate Matter Primary	3.46	15.17	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Sulfur Dioxide (SO2)	.31	1.36	11S	719844.12	3623671.64	85	30	10.5	104.49	250		
001	CTG/Duct Burners/HRSG	Volatile Organic Compounds (VOC)	1.24	5.41	11S	719844.12	3623671.64	85	30	10.5	104.49	250		

GROUND ELEVATION OF FACILITY ABOVE MEANSEA LEVEL 130 feet

ADEQ STANDARD CONDITIONS ARE 293K AND 101.3 KILOPASCALS (A.A.C. R18-2-101)

General Instructions:

- 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.
- 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_x), Sulfur Dioxide (SO₂), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM₁₀), etc. Abbreviations are O.K.
- Pounds per hour (#/HR) is maximum potential emission rate expected by applicant.
- Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.
- 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.
- Supply additional information as follows if appropriate:
 - Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
 - Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.
- Dimensions of nonpoint sources as defined in A.A.C. R18-2-101.

SECTION 2.2 - EMISSION SOURCES

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										DIA (ft.)	VEL. (fps)	TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)
002	Standby Boiler	Carbon Monoxide (CO)	1.62	7.08	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Nitrogen Oxides (NOx)	1.92	8.42	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Particulate Matter Condensable	0.11	0.48	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Particulate Matter Filterable	0.04	0.16	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Particulate Matter Primary	0.15	0.64	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Sulfur Dioxide (SO2)	0.01	0.05	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Volatile Organic Compounds (VOC)	0.11	0.47	11S	719844.12	3623671.64	23	10	2	33	350		
002	Standby Boiler	Lead 7439921	0.00001	0.000042	11S	719844.12	3623671.64	23	10	2	33	350		

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- 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_x), Sulfur Dioxide (SO₂), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM₁₀), etc. Abbreviations are O.K.
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- Supply additional information as follows if appropriate:
 - Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
 - Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.
- Dimensions of nonpoint sources as defined in A.A.C. R18-2-101.

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										DIA (ft.)	VEL. (fps)	TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)
005	Cooling Tower	Total Particulate Matter	2.882	12.624	11S	719844.12	3623671.64	33	8	(2) 34	(2) 9,607	106		
005	Cooling Tower	Particulate Matter 10	1.436	6.289	11S	719844.12	3623671.64	33	8	(2) 34	(2) 9,607	106		
005	Cooling Tower	Particulate Matter 2.5	0.007	0.029	11S	719844.12	3623671.64	33	8	(2) 34	(2) 9,607	106		
005	Cooling Tower	TPS PM30	2.729	11.95	11S	719844.12	3623671.64	33	8	(2) 34	(2) 9,607	106		

GROUND ELEVATION OF FACILITY ABOVE MEANSEA LEVEL 130 feet

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General Instructions:

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- 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_x), Sulfur Dioxide (SO₂), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM₁₀), etc. Abbreviations are O.K.
- Pounds per hour (#/HR) is maximum potential emission rate expected by applicant.
- Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.
- 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.
- Supply additional information as follows if appropriate:
 - Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
 - Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.
- Dimensions of nonpoint sources as defined in A.A.C. R18-2-101.

SECTION 2.3 - EQUIPMENT LIST

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.

Type of Equipment	Maximum Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number
Gas Turbine	36.7 MW (name plate)	GE	Frame 6	29641700	3/10/1994	4101
Heat Recovery Steam Generator (HRSG)	N/A	Nooter Erikson	N/A	932400	1994	5101
Steam Turbine	18.3 MW (name plate)	GE	N/A	155035	04/04/1994	3101
Duct Burner	45 MMBtu/hr	Coen	N/A	5125	1998	5125
Auxiliary Boiler	20 mmBtu/hr	Cleaver Brooks	700-500	L-92034	1993	5175
Internal Combustion Engine Fire Pump	111 hp	Detroit Diesel	50348312	4A21949	1993	M-FG513
Cooling Tower	18,000 gallons per minute	GEA		TD-3636-2-2421	1993	2101
NOx Monitor	N/A	Teledyne	T200M	110	2012	5152
O2 Monitor	N/A	DataTek	DT-02	1299	2012	5151
Flow Monitor	N/A	EMRC	2271	0414	1993	5153

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).

Yuma Cogeneration Associates (YCA) generates electricity for sale and provides energy capacity for the California Independent System Operator (CAISO). Electricity generated by a combustion turbine and a steam turbine is transmitted from YCA through Arizona Public Service transmission lines to CAISO.

The General Electric frame 6 combustion turbine generator is fired by natural gas that contains less than 5 grains of total sulfur per 100 standard cubic feet. See attachment "A" FERC Gas Tariff Agreement Second Revised Volume No. 1 - A for a full description of the natural gas. YCA operates as dispatched by CAISO up to 24 hours per day, up to 365 days per year. A Heat Recovery Steam Generator (HRSG) uses heat from the gas turbine exhaust to generate high, intermediate and low-pressure steam. High pressure steam is sent to a steam turbine generator, which generates electricity, intermediate steam is used to reduce nitrogen oxides emissions from the gas turbine by injecting steam into the combustion section of the gas turbine and the low-pressure steam is not currently being used. The gas fired duct burners are fired as a supplement to the gas turbine exhaust when additional steam is required from the HRSG. The combustion turbine and duct burner emissions are exhausted into the atmosphere through an 85 – foot high stack.

A 20 million Btu/hr gas fired auxiliary (standby) boiler is used to generate intermediate pressure steam for the industrial customer when the combustion turbine is not in operation.

Induced air draft cooling tower is used to complete the steam turbine generator condenser closed cycle by rejecting waste heat from the steam condenser to atmosphere.

Operating emission limits at YCA have remained unchanged from the original Title V permit on May 25, 1999.

The Source Classification Code for Yuma Cogeneration Associates is 4911(Electric Services). The NAICS code is 221112.

YCA is located in a non-attainment area for PM10 and Ozone. YCA is a "Major" source for NOx as defined by Arizona Administration Code (A.A.C.) Title 18, Chapter 2, Article 101(75.c). A major source is a source that has the potential to emit 100 tons per year of any regulated pollutant. Yuma holds and seeks to renew Class I permit, #62714 rev1 63698, under Title V of the Clean Air Act, Title 49, Chapter 3 of the Arizona Revised Statutes, and A.A.C. Title 18, Chapter 2, article 302 (B)(1).

2. Description of product(s).

1. Electrical Power Generation

2. Steam Generation for Steam Turbine and Steam Host

3. Description of alternate operating scenario, if desired by applicant (include Source Classification Code).

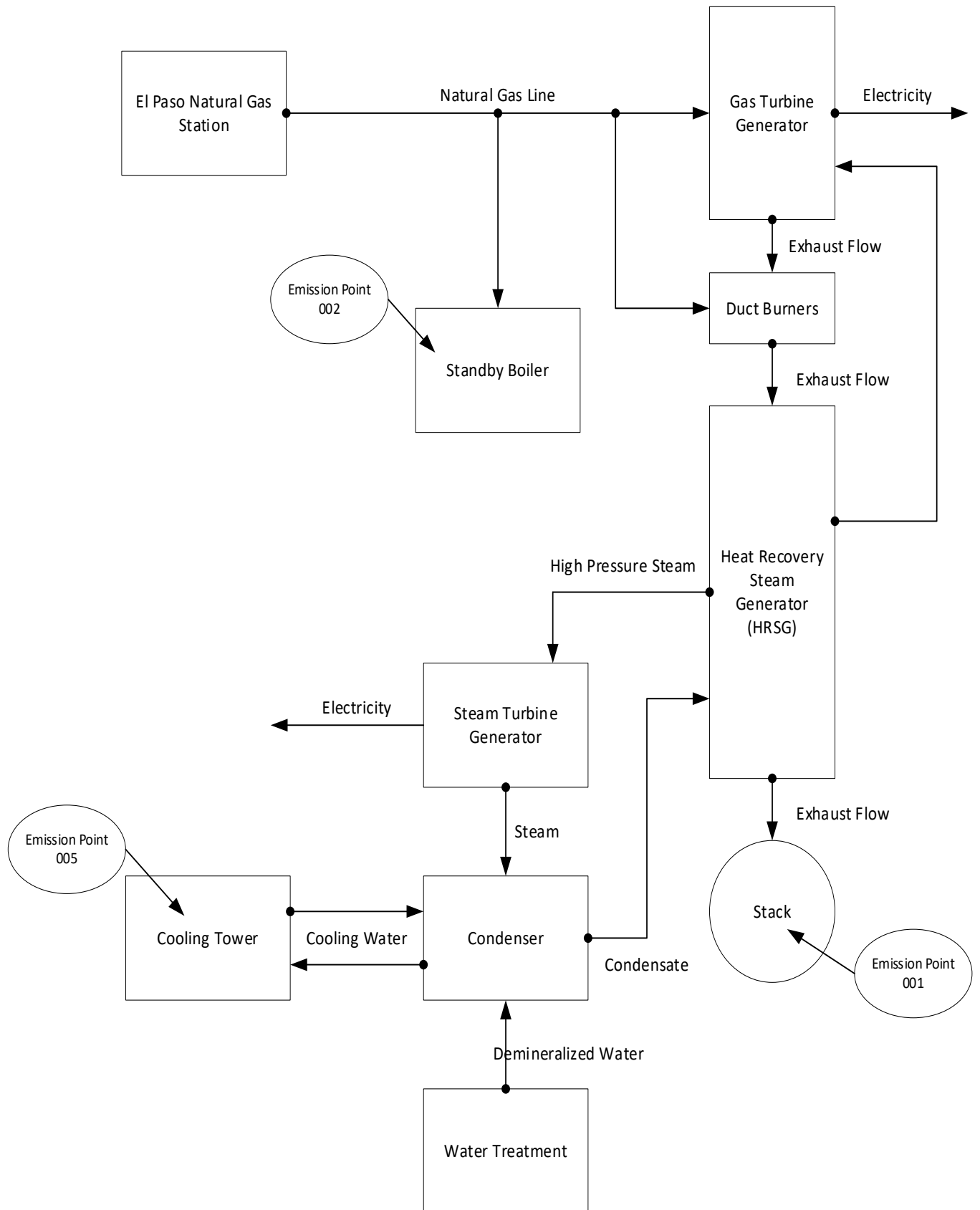
There are no alternate operating scenarios for YCA facilities.

4. Description of alternate operating scenario product(s), if applicable.

N/A

5. A flow diagram for all processes.

Process Flow Diagram



6. A material balance for all processes (optional, only if emission calculations are based on a material balance).

N/A

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.

See Emission Sources Section 2.2.

- 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.

See Emission Sources Section 2.2.

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.

All or parts of the following requirements, listed herein, apply to the operation of Yuma Cogeneration Associates:

Arizona Administrative Code (A.A.C.) Title 18 Chapter 2

Article 3 Permit and Permit Revisions

(Applicable sections of Article 3 pertaining to the requirement to obtain a Title V permit, pay fees, submit compliance certifications, certify the accuracy of records, and conduct monitoring, reporting and recordkeeping for the air emission sources at Yuma)

**Article 6 Emissions from Existing and New Nonpoint Sources
(As it applies to fugitive emission sources at Yuma)**

R18-2-602 Unlawful Open Burning
R18-2-604 Open Areas, Dry Washes, or Riverbeds
R18-2-605 Roadways and Streets
R18-2-606 Material Handling
R18-2-607 Storage Piles

Article 7 Existing Stationary Source Performance Standards
**R18-2-719 Standards of Performance for Existing Stationary Rotating Machinery
(As it applies to the gas turbines and internal combustion engines at Yuma)**
**R18-2-726 Standards of Performance for Sandblasting Operations
(As it applies to the any sandblasting operations performed at Yuma)**
**R18-2-727 Standards of Performance for Spray Painting Operations
(As it applies to the any spray-painting operations performed at Yuma)**
**R18-2-730 Standards of Performance for Unclassified Sources
(As it applies to the cooling tower and fuel storage tank)**

Article 8 Emissions from Mobile Sources (New and Existing)

(As it applies to mobile sources that are not classified as motor vehicles)

R18-2-801	Classification of Mobile Sources
R18-2-802	Off-road Machinery
R18-2-803	Heater-planer Units
R18-2-804	Roadway and Site Cleaning Machinery

Article 9 New Source Performance Standards

R18-2-901.5	40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units.
R18-2-901.40	40 CFR 60, Subpart GG, Stationary Gas Turbines

Arizona Testing Manual

Title V Air Quality Control Permit

Permit No. #62714 rev1 63698

Federal Code of Regulations (CFR) Title 40, Parts 50 – 59

40 CFR 60 Subpart A	New Source Performance Standards
40 CFR 60.7(c), (f)	Notification and Record Keeping
40 CFR 60.8(c)	Performance Tests
40 CFR 60.11(d)	Compliance with Standards and Maintenance Requirements
40 CFR 60.13	Monitoring Requirements (applicable sections)
40 CFR 60 Subpart Dc	Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR 60.48c(a), (g), (i)	Reporting and Record Keeping Requirements
40 CFR 60 Subpart GG	Stationary Gas Turbines
40 CFR 60.332(a)(1),(b)	Standard for Nitrogen Oxides
40 CFR 60.333(b)	Standard for Sulfur Dioxide
40 CFR 60.334(a), (b)(2), (c)(2), (c)(4)	Monitoring of Operations
40 CFR 60.335(a), (c)(1), (c)(2), (d), (e), (f)(1)	Test Methods and Procedures
40 CFR 60 Appendices A-F	Test Methods and Performance Specifications
40 CFR 60 Appendix A	Test Methods 1 -29
40 CFR 60 Appendix B	Performance Specifications 2 – Specifications and Test Procedures for SO₂ and NO_x Continuous Emission Monitoring Systems in Stationary Sources
40 CFR 60 Appendix D	Required Emission Inventory Information
40 CFR 60 Appendix F	Quality Assurance Procedures – Procedure 1 Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination
40 CFR 63 Subpart ZZZZ	Reciprocating Int. Combustion Engines
(Applicable sections of 40 CFR Subpart ZZZZ as it applies to the 111 Hp internal combustion engine at the facility – see Attachment C equipment list in the Title V permit.)	
40 CFR 64	Compliance Assurance Monitoring
40 CFR 64.2(b)	Exemptions – (1) Exempt emission limitations or standards
40 CFR Part 70	State Operating Permit Programs (Title V Permit)
(Applicable sections of 40 CFR Part 70, as incorporated in the Arizona’s regulation and as they affect the facility)	
40 CFR Parts 72 through 73, & 75 through 78)	
U.S. EPA Acid Rain Program	
(The facility will comply with the applicable requirements of 40 CFR Parts 72 through 78, if and when the facility becomes subject to this program including the requirements of :.	

40 CFR Part 72	Permits
40 CFR Part 73	Allowance System
40 CFR Part 75	Continuous Emissions Monitoring
40 CFR Part 76	NOx
40 CFR Part 77	Excess Emissions
40 CFR Part 78	Appeal Procedures
40 CFR Part 98	Greenhouse Gas reporting (for annual greenhouse gas report submitted to EPA)

See Attachment "C" for Insignificant Activities

9. An explanation of any proposed exemptions from otherwise applicable requirements.

1. The GE Frame 6 gas turbine is not subject to the requirements of 40 CFR 63 Subpart YYYYY. Under the regulation, major sources of Hazardous Air Pollutants (HAP) are those that have the potential to emit greater than 10 tpy of any one HAP or 25 tpy of any combination of HAP. Combined total HAP emissions for YCA is 2.65 tpy. Per the calculations attached, YCA is not a major source of HAP emissions.

2. The GE Frame 6 gas turbine is not subject to compliance assurance monitoring (CAM) requirements per 40 CFR 64.2(b)(1). According to 40 CFR 64.2(b)(1)(vi), a source is exempt from compliance assurance monitoring if a continuous compliance determination method is specified in the Title V permit. The Title V permit # 62714 Revision No. 63698, Attachment B II.B.3 requires continuous monitoring for NOx, air flow, fuel use and steam to fuel ratio by CEMS to ensure the NOx emission limit of 25 ppm @ 15% O2 is not exceeded. The condition for exemption is met.

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.**

Gas Turbine (001)	4,161,000	mmbtu natural gas
	350,400	MWh
Duct Burners (001)	394,200	mmbtu natural gas
Standby Boiler (002)	175,200	mmbtu natural gas
	131,400	klbs of steam
Cooling Tower (005)	65,700,000	gallons make up water
	59,918,400	gallons of evaporation
Emergency Diesel Fire Pump	92	gallons of diesel

b. **Maximum annual process rate for the whole plant.**

Cogeneration	4,555,200	mmbtu natural gas
	494,940	MWh
	2,035,824	klbs of steam

- c. **Maximum rated hourly process rate for each piece of equipment which generates air emissions.**

Gas Turbine (001)	475	mmbtu natural gas
	40	mega watts
Duct Burners (001)	45	mmbtu natural gas
Standby Boiler (002)	20	mmbtu natural gas
	15	klbs steam
Cooling Tower (005)	7,500	gallons make up water
	6,840	gallons of evaporation
Emergency Diesel Fire Pump	3.52	gallons of diesel

- d. **Maximum rated hourly process rate for the whole plant.**

Cogeneration	520	mmbtu natural gas
	57	mega watts
	232	klbs of steam

- 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.**

Gas Turbine (001)		
Type:	Natural Gas Pipeline Quality	
2024 total quantity:	302,398	mmbtu
Average per operating hour (732.8 hr 2024):	412.66	mmbtu
Max quantity:	4,161,000	mmbtu
Average per hour for Max:	475	mmbtu
Percent used for process heat:	100%	
2024 average high heating value:	1025	Btu/scf

Duct Burners (001)		
Type:	Natural Gas Pipeline Quality	
2024 total quantity:	12,993	mmbtu
Average per operating hour (732 hrs 2024):	17.73	mmbtu
Max quantity:	394,200	mmbtu
Average per hour for Max:	45	mmbtu
Percent used for process heat:	100%	
2024 average high heating value:	1025	Btu/scf

Standby Boiler (002)		
Type:	Natural Gas Pipeline Quality	
2024 total quantity:	6,654	mmbtu
Average per operating hour (519 hrs 2024):	12.82	mmbtu
Max quantity:	175,200	mmbtu
Average per hour for Max:	20	mmbtu
Percent used for process heat:	100%	
2024 average high heating value:	1024	Btu/scf

Emergency Diesel Fire Pump		
Type:	Ultra Low Sulfur Diesel <15ppm sulfur	
2024 total quantity:	76.74	gallons
Average per operating hour (21.8 hrs 2024):	3.52	gallons
Max quantity:	91.52	gallons
Average per hour for Max (26 hrs):	3.52	gallons
Percent used for process heat:	0%	
2024 average high heating value:	19,604	btu/lb

- f. A description of all raw materials used and the maximum annual and hourly, monthly, or quarterly quantities of each material used. **Refer to question “10. e.” above**
- g. Anticipated Operating Schedules
- (i) **Percent of annual production by season.**

2024 Gas Turbine / Duct Burner (001)	
Winter Activity Percentage	2%
Spring Activity Percentage	2%
Summer Activity Percentage	57%
Fall Activity Percentage	38%

2024 Standby Boiler (002)	
Winter Activity Percentage	65%
Spring Activity Percentage	19%
Summer Activity Percentage	8%
Fall Activity Percentage	8%

2024 Cooling Tower (005)	
Winter Activity Percentage	19%
Spring Activity Percentage	25%
Summer Activity Percentage	27%
Fall Activity Percentage	29%

(ii) Days of the week normally in operation.

7 days a week

(iii) Shifts or hours of the day normally in operation.

Two 12 hour shifts each day

(iv) Number of days per year in operation.

365 days

h. Limitations on source operations and any work practice standards affecting emissions.

The work practice standards of 40 CFR 63 ZZZZ apply to the emergency stationary RICE according to the requirements in Condition IV.D.2.a.(1) of the permit

11. A description of all process and control equipment for which permits are required including:

a. Name. **See Section 2.2**

b. Make (if available). **See Section 2.2**

c. Model (if available). **See Section 2.2**

d. Serial number (if available). **See Section 2.2**

e. Date of manufacture (if available). **See Section 2.2**

f. Size/production capacity. **Refer to question 10**

g. Type. **Refer to table below**

<u>Process Equipment</u>	<u>Control Equipment</u>	<u>Efficiency</u>
Gas Turbine &	Steam Injection 23,580 lb/hr	>80%
- Heat Recovery Steam Generator (HRSG)	Operational set points	
- Steam Turbine	Operational set points	
- Duct Burners	Operational set points	
Auxiliary Boiler	Operational set points	
Internal Combustion Engine Fire Pump	Work practices – 40 CFR 63.Subpart ZZZZ	
Cooling Tower	Drift eliminators	0.008% drift loss
Chemical Storage Tanks		
Painting	Selection of low VOC paints	

12. Stack Information:

- a. Identification. **HRS**
- b. Description. **Heat Recovery Steam Generator**
- c. Building Dimensions. **N/A**
- d. Exit Gas Temperature. **250 deg F**
- e. Exit Gas Velocity. **104.49 fps**
- f. Height. **85 feet**
- g. Inside Dimensions. **10.5 feet**

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.

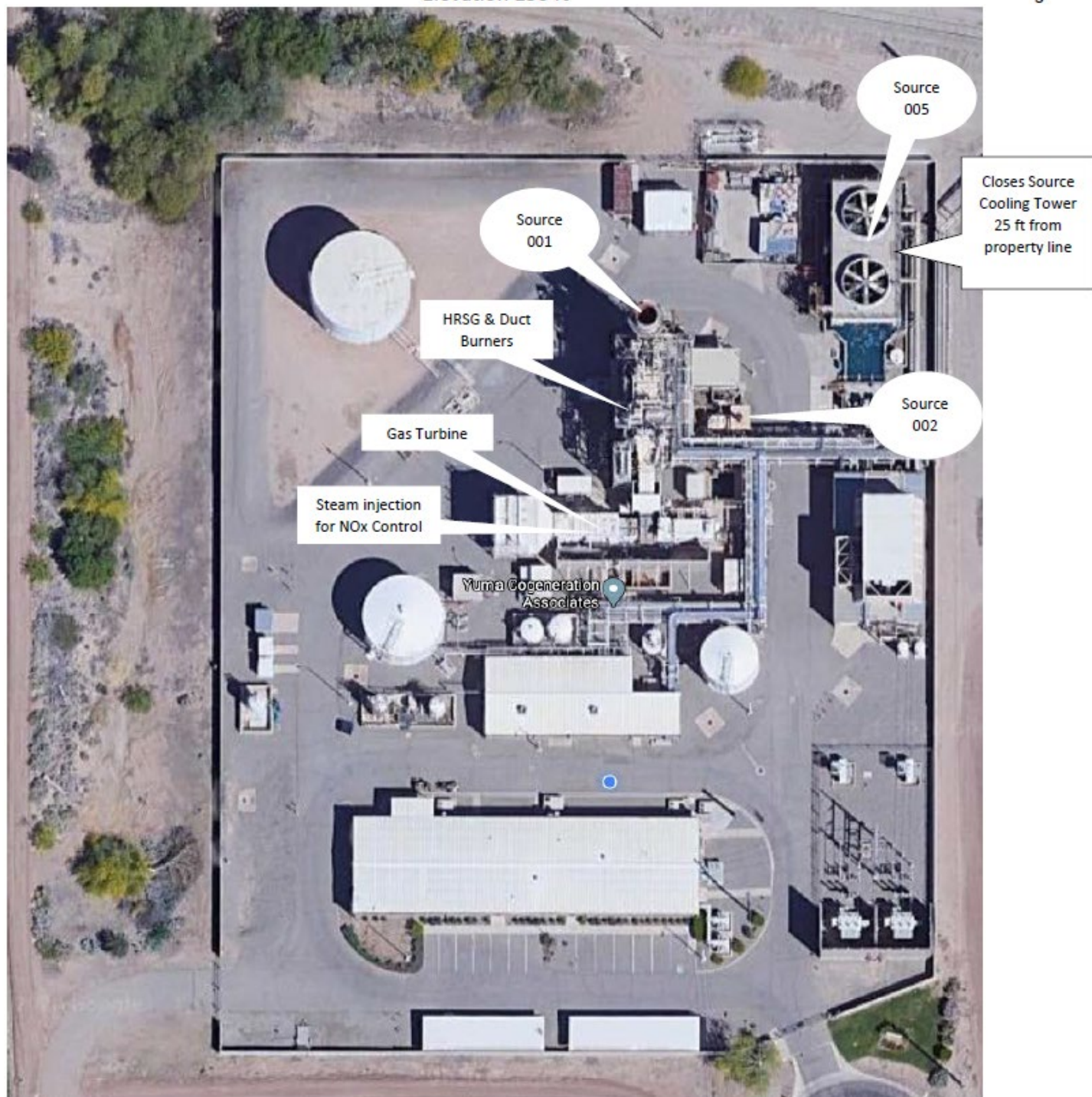
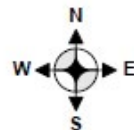
Yuma Cogeneration Associates Site Diagram

Elevation 130 ft



Yuma Cogeneration Associates Site Diagram

Elevation 130 ft



Yuma Cogeneration Associates Site Diagram

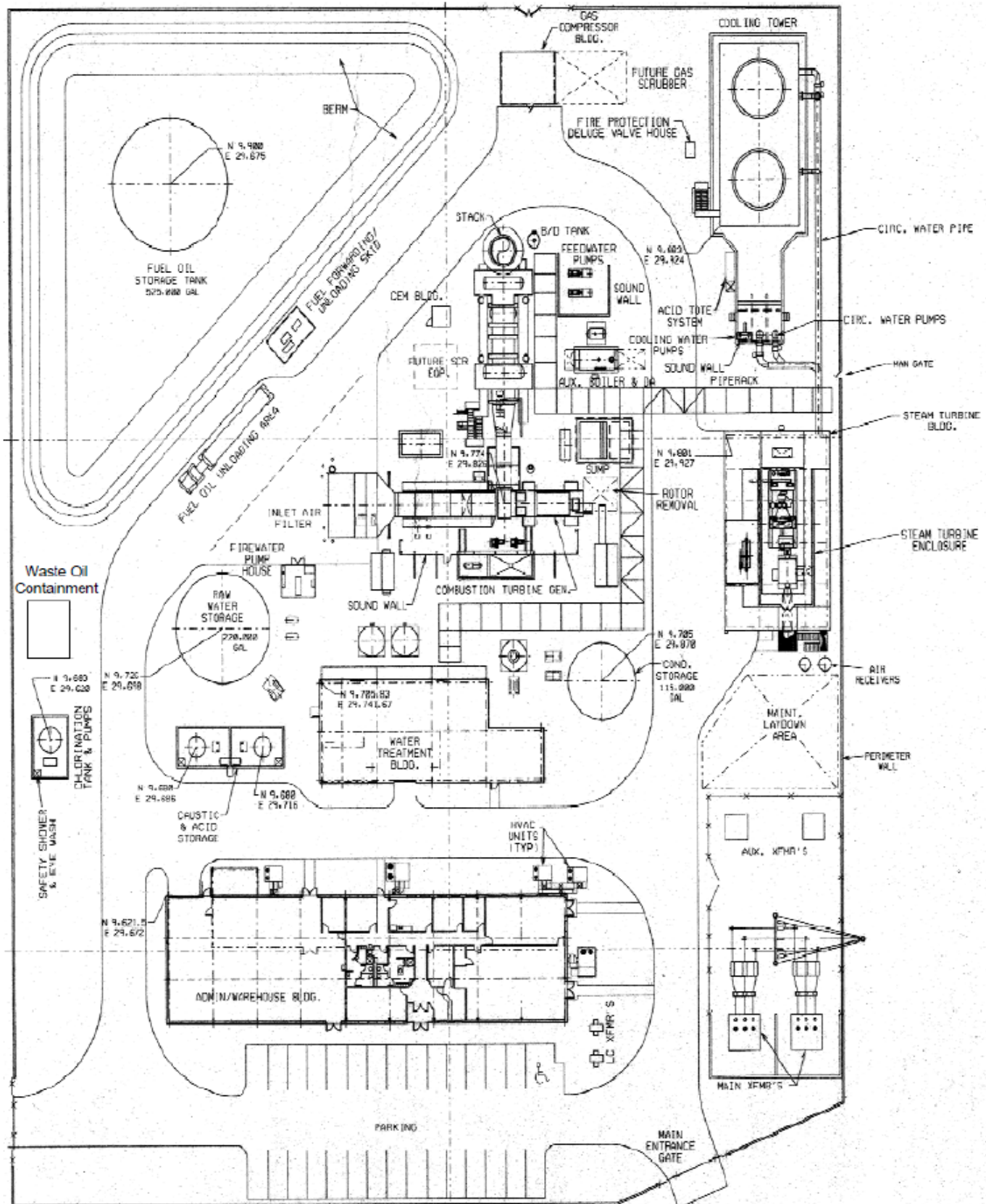
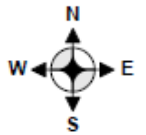
Elevation 130 ft

Red line represents Yuma Cogeneration property line



Yuma Cogeneration Associates Site Diagram

Elevation 130 ft



14. Air Pollution Control Information:

- a. Description of or reference to any applicable test method for determining compliance with each applicable requirement.
- **Annual Compliance Testing / Relative Accuracy Test Audit for NO_x and CO**
 - **Continuous Emissions Monitoring (CEMS) for NO_x and O₂ from Gas Turbine and Duct Burners**
 - **Steam Injection monitoring to Gas Turbine**
 - **Opacity readings for stationary equipment**
- b. Identification, description and location of air pollution control equipment, including spray nozzles and hoods, and compliance monitoring devices or activities.

See question number 11 response

- c. The rated and operating efficiency of air pollution control equipment.

See question number 11 response

- 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).

Steam to Fuel ratio of 1.32 @15% O₂ equals 21.12 ppm NO_x

Dry O ₂	Raw NO _x ppmvd	Flow Dry kscf/hr	Nox ppmvd @ 15%	Total Fuel	Steam lbs/hr	MW	S/F Ratio	Deg F	NOX Lbs/Hr	NOX lbs/mmbtu
15.00	21.12	12,034	21.12	20,896	27,514	54.40	1.32	238.51	30.35	0.080

- 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.

No modification or new equipment has been installed at Yuma Cogeneration Associates

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: **Yuma Cogeneration is in compliance during the permitting period**
- (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.

Yuma Cogeneration Associates is in compliance with all applicable 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.

Yuma Cogeneration will meet such requirements on a timely basis if applicable requirements are determined during the permitting period.
 - (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.

Yuma Cogeneration Associates is in compliance with all applicable requirements.
- 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:

This section is handled in #8 & 9 of the application form; Section 2.4

- 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.
- 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.

See Attachment "B"

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:

Yuma Cogeneration addressed this Section via Significant Revision No. 63698. Therefore, not necessary for the renewal application

- 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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

- (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.

Not applicable: The source is not new

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

Gas Turbine (001)

Emissions while firing natural gas for 8,760 hours/year at 475 mmbtu per hour

The following calculations were based on source testing

Emission Calculation		lb/hr	Tons per year
NOX	25 ppm @ 15% O ₂ = 48 lb/hr (worst case performance testing)	48.00	210.24
The following calculations were performed using emission factors from the Fifth Edition (1995) of AP-42, updated in 1998 Table 3.1-1 Stationary Gas Turbine Emission Factors final section supplemental F , April 2000			
CO	3.00 E-02 lbs/mmbtu (0.030 * 475 mmbtu per hour = 14.25 lbs/hour)	14.25	62.42
PM-CON	4.70E-03 lbs/mmbtu (0.00470 * 475 mmbtu per hour = 2.233 lbs/hour)	2.23	9.78
PM10-FIL	1.90E-03 lbs/mmbtu (0.00190 * 475 mmbtu per hour = 0.903 lbs/hour)	0.90	3.95
PM10-PRI	(Filt+Cond) 6.60E-03 lb/mmbtu (0.00660 * 475 mmbtu per hour = 3.135 lbs/hour)	3.13	13.73
PM2.5-FIL	1.90E-03 lbs/mmbtu (0.00190 * 475 mmbtu per hour = 0.903 lbs/hour)	0.90	3.95
PM2.5-PRI	(Filt+Cond) 6.60E-03 lb/mmbtu (0.0066 * 475 mmbtu per hour = 3.135 lbs/hour)	3.13	13.73
SO ₂	6.00 E-04 lb/mmbtu (0.000600 * 475 mmbtu per hour = 0.285 lbs/hour)	0.28	1.25
VOC	2.10E-03 lbs/mmbtu (0.00210 * 475 mmbtu per hour = 0.998 lbs/hour)	0.99	4.37

Duct Burner (001)

Emissions while firing natural gas for 8,760 hours at 45 mmbtu per hour

The following calculations were performed using emission factors from the Fifth Edition of AP-42, updated in July 1998, Table 1.4.1 of Section 1.4.5, Natural Gas Combustion for Small Industrial Boilers <100 MMBtu/hr. High heating value 1040 Btu/scf

Emission Calculation		lbs/hr	Tons per year
NOX	100 lb/10 ⁶ scf (45 mmbtu/1040 * 100 lb = 4.329 lbs/hour)	4.32	18.95
CO	84 lb/10 ⁶ scf (45 mmbtu/1040 * 84 lb = 3.634 lbs/hour)	3.63	15.92
PM-CON	5.7 lb/10 ⁶ scf (45 mmbtu/1040 * 5.7 lb = 0.246 lbs/hour)	0.24	1.08
PM10-FIL	1.9 lb/10 ⁶ scf (45 mmbtu/1040 * 1.9 lb = 0.082 lbs/hour)	0.08	0.36
PM10-PRI	(Filt +Cond) 7.6 lb/10 ⁶ scf (45 mmbtu/1040 * 7.6 lb = 0.328 lbs/hour)	0.32	1.44
PM2.5-FIL	1.9 lb/10 ⁶ scf (45 mmbtu/1040 * 1.9 lb = 0.082 lbs/hour)	0.08	0.36
PM2.5-PRI	(Filt +Cond) 7.6 lb/10 ⁶ scf (45 mmbtu/1040 * 7.6 lb = 0.328 lbs/hour)	0.32	1.44
SO ₂	0.6 lb/10 ⁶ scf (45 mmbtu/1040 * 0.6 lb = 0.0259 lbs/hour)	0.02	0.11
VOC	5.5 lb/10 ⁶ scf (45 mmbtu/1040 * 5.5 lb = 0.237 lbs/hour)	0.23	1.04

Auxiliary Standby Boiler (002)

Emissions while firing natural gas for 8,760 hours at 20 mmbtu per hour

The following calculations were performed using emission factors from the Fifth Edition (1995) of AP-42, updated in July 1998, Table 1.4.1 of Section 1.4.5, Natural Gas Combustion for Small Industrial Boilers <100 MMBtu/hr. High heating value 1040 Btu/scf

Emission Calculation		lb/hr	Tons per year
NOX	100 lb/10 ⁶ scf (20 mmbtu/1040 * 100 lb = 1.923 lbs/hour)	1.92	8.42
CO	84 lb/10 ⁶ scf (20 mmbtu/1040 * 84 lb = 1.615 lbs/hour)	1.61	7.08
PM-CON	5.7 lb/10 ⁶ scf (20 mmbtu/1040 * 5.7 lb = 0.1096 lbs/hour)	0.11	0.48
PM10-FIL	1.9 lb/10 ⁶ scf (20 mmbtu/1040 * 1.9 lb = 0.037 lbs/hour)	0.03	0.16
PM10-PRI	(Filt +Cond) 7.6 lb/10 ⁶ scf (20 mmbtu/1040 * 7.6 lb = 0.146 lbs/hour)	0.14	0.64
PM2.5-FIL	1.9 lb/10 ⁶ scf (20 mmbtu/1040 * 1.9 lb = 0.037 lbs/hour)	0.03	0.16
PM2.5-PRI	(Filt +Cond) 7.6 lb/10 ⁶ scf (20 mmbtu/1040 * 7.6 lb = 0.146 lbs/hour)	0.14	0.64
SO2	0.6 lb/10 ⁶ scf (20 mmbtu/1040 * 0.6 lb = 0.012 lbs/hour)	0.01	0.05
VOC	5.5 lb/10 ⁶ scf (20 mmbtu/1040 * 5.5 lb = 0.107 lbs/hour)	0.10	0.46
Lead	0.0005 lb/10 ⁶ scf (20 mmbtu/1040 * 0.0005 lb = 0.00001 lbs/hour)	0.00001	0.000042

Cooling Tower (005)

Emissions operating 8,760 hours at 18,000 gpm

The emission factor for a Wet Cooling Towers was calculated using the following calculation and parameters.

$$E = V * (TDS/10^6) * (D/100) * W * 60$$

Where

E = Annual Emissions in lbs per hour (lbs/hr)

V = Cooling Tower Circulating Water Rate: 18,000 gpm

TDS = Concentration of total dissolved solids: 4,000 ppm

D = Drift loss of circulating water: 0.008 %

W = Density of water: 8.34 lb/gal

60 = Conversion from minutes to hours

PM2.5 = PM lb/hr * TDS % Mass (see size distribution chart below)

PM10 = PM lb/hr * TDS % Mass (see size distribution chart below)

TPS/ PM30 = PM lb/hr * TDS % Mass (see size distribution chart below)

Emission Calculation		lb/hr	Tons per year
PM	18,000 * (4000/10 ⁶) * (0.008/100) * 8.34 * 60 = lbs/hr	2.88	12.62
PM2.5	0.226% * PM lb/hr = lbs/hr	0.007	0.029
PM10	49.812% * PM lb/hr = lbs/hr	1.43	6.28
TPS/PM30	94.689% * PM lb/hr = lbs/hr	2.73	11.95

Size Distribution

1000 ppm (TDS)		2000 ppm		3000 ppm		% Mass
d _d	d _p	d _d	d _p	d _d	d _p	≤
10	0.7387304	10	0.930527	10	1.0650435	0
20	1.4774608	20	1.8610539	20	2.130087 PM2.5	0.196
30	2.2161912	30	2.7915809 PM2.5	30	3.1951306 PM2.5	0.226
40	2.9549216 PM2.5	40	3.7221079	40	4.2601741	0.514
50	3.693652	50	4.6526349	50	5.3252176	1.816
60	4.4323825	60	5.5831618	60	6.3902611	5.702
70	5.1711129	70	6.5136888	70	7.4553046	21.348
90	6.6485737	90	8.3747427	90	9.5853917	49.812
110	8.1260345	110	10.235797 PM10	110	11.715479 PM10	70.509
130	9.6034953	130	12.096851	130	13.845566	82.023
150	11.080956 PM10	150	13.957905	150	15.975653	88.012
180	13.297147	180	16.749485	180	19.170783	91.032
210	15.513339	210	19.541066	210	22.365914	92.468
240	17.72953	240	22.332647	240	25.561045	94.091
270	19.945721	270	25.124228	270	28.756175	94.689
300	22.161912	300	27.915809	300	31.951306 TSP/PM30	96.288
350	25.855564	350	32.568444 TSP/PM30	350	37.276523	97.011
400	29.549216	400	37.221079	400	42.601741	98.34
450	33.242868 TSP/PM30	450	41.873714	450	47.926958	99.071
500	36.93652	500	46.526349	500	53.252176	99.071
600	44.323825	600	55.831618	600	63.902611	100

Size Distribution

4000 ppm (TDS)		5000 ppm		6000 ppm		% Mass
d _d	d _p	d _d	d _p	d _d	d _p	≤
10	1.1721197	10	1.2625337	10	1.3415607	0
20	2.3442393	20	2.5250675 PM2.5	20	2.6831215 PM2.5	0.196
30	3.516359 PM2.5	30	3.7876012	30	4.0246822	0.226
40	4.6884787	40	5.0501349	40	5.366243	0.514
50	5.8605984	50	6.3126686	50	6.7078037	1.816
60	7.032718	60	7.5752024	60	8.0493645	5.702
70	8.2048377	70	8.8377361	70	9.3909252	21.348
90	10.549077 PM10	90	11.362804 PM10	90	12.074047 PM10	49.812
110	12.893316	110	13.887871	110	14.757168	70.509
130	15.237556	130	16.412938	130	17.44029	82.023
150	17.581795	150	18.938006	150	20.123411	88.012
180	21.098154	180	22.725607	180	24.148093	91.032
210	24.614513	210	26.513208	210	28.172776	92.468
240	28.130872	240	30.300809 TSP/PM30	240	32.197458 TSP/PM30	94.091
270	31.647231 TSP/PM30	270	34.088411	270	36.22214	94.689
300	35.16359	300	37.876012	300	40.246822	96.288
350	41.024188	350	44.18868	350	46.954626	97.011
400	46.884787	400	50.501349	400	53.66243	98.34
450	52.745385	450	56.814018	450	60.370234	99.071
500	58.605984	500	63.126686	500	67.078037	99.071
600	70.32718	600	75.752024	600	80.493645	100

Hazardous Air Pollutants

Emissions while firing natural gas for 8,760 hours

The Gas Turbine calculations were performed using emission factors from the Fifth Edition (1995) of AP-42 updated in July 1998 Table 3.1-3 Stationary Gas Turbine Emission Factors. The Duct Burner and Auxiliary Standby Boiler calculations were performed using emission factors from the Fifth Edition (1995) of AP-42, updated in 1998, Table 1.4.3 of Section 1.4, Natural Gas Combustion for Small Industrial Boilers <100 MMBtu/hr. High heating value 1040 Btu/scf

Natural Gas Max Hourly mmbtu Throughput			475	45	20	
Total Hours			8760	8760	8760	
High Heating Value			1040	1040	1040	
AP-42 updated in 1998 Table 3.1-3 Stationary Gas Turbine Emission Factors.						
Pollutant	Emission Factor		Gas Turbine Tons per year	Duct Burners Tons per Year	Standby Boiler Tons per year	Facility Total Tons per year
1,3-Butadiene	4.30E-07	lb/MMBTU	8.95E-04	n/a	n/a	8.95E-04
Acetaldehyde	4.00E-05	lb/MMBTU	8.32E-02	n/a	n/a	8.32E-02
Acrolein	6.40E-06	lb/MMBTU	1.33E-02	n/a	n/a	1.33E-02
Benzene	1.20E-05	lb/MMBTU	2.50E-02	n/a	n/a	2.50E-02
Ethylbenzene	3.20E-05	lb/MMBTU	6.66E-02	n/a	n/a	6.66E-02
Formaldehyde	7.10E-04	lb/MMBTU	1.48E+00	n/a	n/a	1.48E+00
Naphthalene	1.30E-06	lb/MMBTU	2.70E-03	n/a	n/a	2.70E-03
PAH	2.20E-06	lb/MMBTU	4.58E-03	n/a	n/a	4.58E-03
Propylene oxide	2.90E-05	lb/MMBTU	6.03E-02	n/a	n/a	6.03E-02
Toluene	1.30E-04	lb/MMBTU	2.70E-01	n/a	n/a	2.70E-01
Xylene	6.40E-05	lb/MMBTU	1.33E-01	n/a	n/a	1.33E-01

AP-42, updated in 1998, Table 1.4-3 & 1.4-4 of Section 1.4, Natural Gas Combustion for Small Industrial Boilers <100 MMBtu/hr.

2-Methylnaphthalene	2.40E-05 lb/10 ⁶ scf	n/a	4.55E-06	2.02E-06	6.57E-06
3-Methylchloranthrene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Dimethylbenz(a)anthracene	1.60E-05 lb/10 ⁶ scf	n/a	3.03E-06	1.35E-06	4.38E-06
Acenaphthene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Acenaphthylene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Anthracene	2.40E-06 lb/10 ⁶ scf	n/a	4.55E-07	2.02E-07	6.57E-07
Benz(a)anthracene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Benzene	2.10E-03 lb/10 ⁶ scf	n/a	3.98E-04	1.77E-04	5.75E-04
Benzo(a)pyrene	1.20E-06 lb/10 ⁶ scf	n/a	2.27E-07	1.01E-07	3.29E-07
Benzo(b)fluoranthene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Benzo(g,h,i)perylene	1.20E-06 lb/10 ⁶ scf	n/a	2.27E-07	1.01E-07	3.29E-07
Benzo(k)fluoranthene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Chrysene	1.80E-06 lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Dibenzo(a,h)anthracene	1.20E-06 lb/10 ⁶ scf	n/a	2.27E-07	1.01E-07	3.29E-07
Dichlorobenzene	1.20E-03 lb/10 ⁶ scf	n/a	2.27E-04	1.01E-04	3.29E-04

Fluoranthene	3.00E-06	lb/10 ⁶ scf	n/a	5.69E-07	2.53E-07	8.21E-07
Fluorene	2.80E-06	lb/10 ⁶ scf	n/a	5.31E-07	2.36E-07	7.67E-07
Formaldehyde	7.50E-02	lb/10 ⁶ scf	n/a	1.42E-02	6.32E-03	2.05E-02
Hexane	1.80E+00	lb/10 ⁶ scf	n/a	3.41E-01	1.52E-01	4.93E-01
Indeno(1,2,3-cd)pyrene	1.80E-06	lb/10 ⁶ scf	n/a	3.41E-07	1.52E-07	4.93E-07
Naphthalene	6.10E-04	lb/10 ⁶ scf	n/a	1.16E-04	5.14E-05	1.67E-04
Phenanthrene	1.70E-05	lb/10 ⁶ scf	n/a	3.22E-06	1.43E-06	4.65E-06
Pyrene	5.00E-06	lb/10 ⁶ scf	n/a	9.48E-07	4.21E-07	1.37E-06
Toluene	3.40E-03	lb/10 ⁶ scf	n/a	6.44E-04	2.86E-04	9.31E-04
Arsenic	2.00E-04	lb/10 ⁶ scf	n/a	3.79E-05	1.68E-05	5.48E-05
Beryllium	1.2000E-05	lb/10 ⁶ scf	n/a	2.27E-06	1.01E-06	3.29E-06
Cadmium	1.1000E-03	lb/10 ⁶ scf	n/a	2.08E-04	9.27E-05	3.01E-04
Chromium	1.4000E-03	lb/10 ⁶ scf	n/a	2.65E-04	1.18E-04	3.83E-04
Cobalt	8.4000E-05	lb/10 ⁶ scf	n/a	1.59E-05	7.08E-06	2.30E-05
Manganese	3.8000E-04	lb/10 ⁶ scf	n/a	7.20E-05	3.20E-05	1.04E-04
Mercury	2.6000E-04	lb/10 ⁶ scf	n/a	4.93E-05	2.19E-05	7.12E-05
Nickel	2.1000E-03	lb/10 ⁶ scf	n/a	3.98E-04	1.77E-04	5.75E-04
Selenium	2.4000E-05	lb/10 ⁶ scf	n/a	4.55E-06	2.02E-06	6.57E-06
Total HAPs			2.14E+00	3.58E-01	1.59E-01	2.65E+00

Gas Turbine Greenhouse Gas Emissions

Emissions while firing natural gas for 8,760 hours at 475 mmbtu per hour

The following calculation were performed using GHG subpart C equation C-1a & C-8a of the Tier 1 Calculation Methodology

$$\text{CO}_2 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(53.06) (\text{kg CO}_2/\text{mmbtu}) * 1.1023)$$

$$\text{CH}_4 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(0.001) (\text{kg CH}_4/\text{mmbtu}) * 1.1023)$$

$$\text{N}_2\text{O} = (1 \times 10^{-3} * \text{mmbtu} * \text{EF} (0.0001) (\text{kg N}_2\text{O}/\text{mmbtu}) * 1.1023)$$

(1.1023 conversion factor from metric tons to short tons).

Emission Calculation		lb/hr Emissions	Tons per Year
CO ₂	$0.001 * 475 \text{ mmbtu} * 53.06 * 1.1023 * 2000 = 55,564 \text{ lbs/hour}$	55,564	243,369
CH ₄	$0.001 * 475 \text{ mmbtu} * .001 * 1.1023 * 2000 = 1.0472 \text{ lbs/hour}$	1.0472	4.59
N ₂ O	$0.001 * 475 \text{ mmbtu} * .0001 * 1.1023 * 2000 = 0.1047 \text{ lbs/hour}$	0.1047	0.46

Duct Burners Greenhouse Gas Emissions

Emissions while firing natural gas for 8,760 hours at 45 mmbtu per hour

The following calculation were performed using GHG subpart C equation C-1a & C-8a of the Tier 1 Calculation Methodology

$$\text{CO}_2 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(53.06) (\text{kg CO}_2/\text{mmbtu}) * 1.1023)$$

$$\text{CH}_4 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(0.001) (\text{kg CH}_4/\text{mmbtu}) * 1.1023)$$

$$\text{N}_2\text{O} = (1 \times 10^{-3} * \text{mmbtu} * \text{EF} (0.0001) (\text{kg N}_2\text{O}/\text{mmbtu}) * 1.1023)$$

(1.1023 conversion factor from metric tons to short tons).

Emission Calculation		lb/hr Emissions	Tons per Year
CO ₂	$0.001 * 45 \text{ mmbtu} * 53.06 * 1.1023 * 2000 = 5,264 \text{ lbs/hour}$	5,264	23,056
CH ₄	$0.001 * 45 \text{ mmbtu} * 0.001 * 1.1023 * 2000 = 0.0992 \text{ lbs/hour}$	0.0992	0.43
N ₂ O	$0.001 * 45 \text{ mmbtu} * 0.0001 * 1.1023 * 2000 = 0.0099 \text{ lbs/hour}$	0.0099	0.04

Auxiliary Standby Boiler Greenhouse Gas Emissions

Emissions while firing natural gas for 8,760 hours at 20 mmbtu per hour

The following calculation were performed using GHG subpart C equation C-1a & C-8a of the Tier 1 Calculation Methodology

$$\text{CO}_2 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(53.06) (\text{kg CO}_2/\text{mmbtu}) * 1.1023)$$

$$\text{CH}_4 = (1 \times 10^{-3} * \text{mmbtu} * \text{EF}(0.001) (\text{kg CH}_4/\text{mmbtu}) * 1.1023)$$

$$\text{N}_2\text{O} = (1 \times 10^{-3} * \text{mmbtu} * \text{EF} (0.0001) (\text{kg N}_2\text{O}/\text{mmbtu}) * 1.1023)$$

(1.1023 conversion factor from metric tons to short tons).

Emission Calculation		lb/hr Emissions	Tons per Year
CO ₂	$0.001 * 20 \text{ mmbtu} * 53.06 * 1.1023 * 2000 = 2,340 \text{ lbs/hour}$	2,340	10,247
CH ₄	$0.001 * 20 \text{ mmbtu} * 0.001 * 1.1023 * 2000 = 0.0441 \text{ lbs/hour}$	0.0441	0.19
N ₂ O	$0.001 * 20 \text{ mmbtu} * 0.0001 * 1.1023 * 2000 = 0.0044 \text{ lbs/hour}$	0.0044	0.02

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 (PM₁₀, NO_x, SO_x, 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 at:

<http://www.azdeq.gov/environ/air/permits/airdispersionmodeling.html>

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

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

- (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=7716bad8c76b30368044a215ff74fdbe&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

These rules (Rule 300 through Rule 372) are available at:

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 CCCCC (Gasoline Distribution)
8. 40 CFR 63, Subpart HHHHH (Paint Stripping and Miscellaneous Surface Coating Operations)
9. 40 CFR 63, Subpart JJJJJ (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 ₁₀	PM ₁₀ , Serious	70
PM _{2.5}	PM _{2.5} Serious	70
PM _{2.5} precursors identified in A.A.C. R18-2-101(124)(a)	PM _{2.5} Serious	70

NO _x	Ozone, Serious	50
NO _x	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 modification⁶. 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 _{2.5} (primary emissions only)	5 tons per year
PM ₁₀	7.5 tons per year
SO ₂	20 tons per year
NO _x	20 tons per year
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_{2.5} in all areas.
 - c. Nitrogen oxides are precursors to PM_{2.5} 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_{2.5} emissions, and PM₁₀ 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_{2.5} and PM₁₀ 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_{2.5}

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)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
PM ₁₀	15 tpy
PM _{2.5}	10 tpy of direct PM _{2.5} 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 ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5 x 10 ⁻⁶ tpy
Municipal waste combustor metals (measured as particulate matter)	15 tpy
Municipal waste combustor acid gases (measured as sulfur dioxide and	40 tpy

Pollutant	Emissions Rate
hydrogen chloride)	
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 µg/m³ (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 in-source 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

IV. 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?				

Attachment "A"

3. QUALITY

3.1 General Specifications. Unless otherwise provided in Sections 3.2 and/or 3.4 of the GT&C, Shipper warrants that all Natural Gas received by Transporter at any mainline Receipt Point(s) shall conform to the following specifications and must be, in Transporter's reasonable judgment, otherwise merchantable:

- (a) Liquids - The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is received. The gas shall in no event contain water vapor in excess of seven (7) pounds per million standard cubic feet.
- (b) Hydrocarbon Dew Point - The hydrocarbon dew point of the gas received shall not exceed twenty degrees Fahrenheit (20°F) at normal pipeline operating pressures.
- (c) Total Sulfur - The gas shall not contain more than five (5) grains of total sulfur, which includes hydrogen sulfide, carbonyl sulfide, carbon disulfide, mercaptans, and mono-, di- and poly-sulfides, per one hundred (100) standard cubic feet. The gas shall also meet the following individual specifications for hydrogen sulfide, mercaptan sulfur or organic sulfur:
 - (i) Hydrogen Sulfide - The gas shall not contain more than one-quarter (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet.
 - (ii) Mercaptan Sulfur - The mercaptan sulfur content shall not exceed more than three-quarters (0.75) grain per one hundred (100) standard cubic feet.
 - (iii) Organic Sulfur - The organic sulfur content shall not exceed one and one-quarter (1.25) grains per one hundred (100) standard cubic feet, which includes mercaptans, mono-, di- and poly-sulfides, but it does not include hydrogen sulfide, carbonyl sulfide or carbon disulfide.
- (d) Oxygen - The oxygen content shall not exceed two-tenths of one percent (0.2%) by volume and every reasonable effort shall be made to keep the gas delivered free of oxygen.
- (e) Carbon Dioxide - The gas shall not have a carbon dioxide content in excess of two percent (2%) by volume, except for gas acceptable under Sections 3.2 and 3.4 of the GT&C.
- (f) Diluents - The gas shall not at any time contain in excess of three percent (3%) total diluents (the total combined carbon dioxide, nitrogen, helium, oxygen, and any other diluent compound) by volume, except for gas acceptable under Sections 3.2 and 3.4 of the GT&C.

3.1 General Specifications (continued)

- (g) Dust, Gums and Solid Matter - The gas shall be commercially free of dust, gums and other solid matter.
- (h) Heating Value - The gas shall have a Heating Value of not less than 967 Btu per cubic foot.
- (i) Temperature - The gas received by Transporter shall be at temperatures not in excess of one hundred twenty degrees Fahrenheit (120°F) nor less than fifty degrees Fahrenheit (50°F). Any party tendering gas at a temperature standard less than fifty degrees Fahrenheit (50°F) shall receive a waiver of such standard only if a test has been conducted in accordance with procedures set forth in Section 3.10(b) hereof and the results from such test demonstrate that the particular segment of the pipeline tested can be safely operated below the fifty degrees Fahrenheit (50°F) temperature standard.
- (j) Deleterious Substances - The gas shall not contain deleterious substances in concentrations that are hazardous to health, injurious to pipeline facilities or adversely affect merchantability.

3.2 Grandfathered Receipts. Transporter agrees that at certain grandfathered plant Receipt Points and Interconnects on Transporter's system described below, where gas does not conform to the carbon dioxide and/or the total diluent specification set forth in Sections 3.1(e) and (f) of the GT&C, gas shall be received according to the provisions of this Section 3.2 which are based on the highest non-conforming monthly average percentages of carbon dioxide and total diluents for a Month during the twelve (12) Month base period ended July 31, 1990. Under this Section 3.2:

- (a) Transporter shall accept gas with carbon dioxide and/or total diluents at percentages up to the non-conforming specifications at volumes up to the residue volume at the plant design capacity or historical Interconnect volumes, as such existed on July 31, 1990, provided, however, that to the extent Transporter must curtail non-conforming volumes to meet Transporter's Delivery Point specifications for carbon dioxide and/or total diluents, Transporter shall curtail volumes at these plants down to 125% of historical volumes.
- (b) Historical volumes for non-conforming plants shall be deemed to be the daily average for the highest monthly tailgate volume delivered to Transporter during the twelve (12) Month base period ended July 31, 1990 and in the event a non-conforming plant or plants are closed, Transporter shall transfer the applicable historical volumes to another plant owned by the same party.
- (c) The identification of the non-conforming plants, the grandfathered specifications and the historical volumes are set forth on the table below.

3.2 Grandfathered Receipts
 (c) (continued)

NON-CONFORMING PLANTS

LOCATION	METER CODE	CO2 MOL %	GRANDFATHERED SPECIFICATIONS	
			TOTAL DILUENTS MOL%	HISTORICAL VOLUME (MCF/D)
Slaughter Plant (IAMSLAUG)	77-039	-	11.89	6,915
Jal Complex (JALCPLX)	01-814	-	4.31	28,518
Jameson Plant (ISUNJAME)	77-078	-	7.02	2,823
Midkiff Plant (IMIDKIFF)	01-079	-	4.95	39,371
Goldsmith Plant (IPHGOLDS)	02-381	-	5.23	62,267
Lee Plant (IPHLEE)	77-025	-	7.34	27,484
Eunice Plant (IPHEUNIC)	77-287	-	5.15	57,672
Fullerton Plant (IPHFULTN)	77-289	-	6.18	28,200
Spraberry Plant (IPHSPBRY)	77-248	-	4.64	11,277
San Juan River Plant (ISJRVPLT)	01-125	-	4.35	32,827
Sterling Plant (ICONSTER)	14-447	3.55	4.09	37,390
TXL Plant (ISHTXL)	77-029	-	6.17	12,054
Terrell Plant (ITERRELL)	01-596	2.89	4.53	102,708
Denton Plant (IDENTON)	77-001	-	5.02	2,554
Perkins Plant (IUTPERKN)	77-068	-	10.19	9,178
Val Verde Plant (IMOITRKA)	14-136	2.13	-	195,985
Monument Plant (IWARMONU)	77-045	-	4.04	31,576
Saunders Plant (IWARSAUD)	77-046	-	5.75	12,421

3.2 Grandfathered Receipts (continued)

- (c) The identification of the non-conforming Interconnects, the grandfathered specifications and the historical volumes are set forth on the table below.

NON-CONFORMING INTERCONNECTS

HISTORICAL

LOCATION	METER CODE	CO2 MOL %	TOTAL DILUENTS MOL%	VOLUME (MCF/D)
Big Blue Receipt Point (IBIGBLUE)	14-091		9.50	11,900
Ignacio Dry Gas (ICOLODRY)	01-127	3.13	3.22	37,595
Northern Natural Plains (INN30PLA)	40-018	4.22		111,072
Plains Compressor (Westar-Felmac) (IW40-043)	40-043	4.50		8,464

- (d) In addition, Transporter agrees to accept, on a grandfathered basis, gas that does not conform to the sulfur specifications set forth in Section 3.1(c) of the GT&C for Natural Gas received at the tailgate of the Terrell Plant, based on the actual monthly highest non-conforming concentrations during the twelve (12) Month base period ending July 31, 1990. The sulfur specification Transporter shall accept for Natural Gas at volumes up to the residue volume at plant design capacity received at the tailgate of the plant is identified below.

Grandfathered Non-conforming Sulfur Specifications (grains per 100 standard cubic feet)

HYDROGEN SULFIDE	HISTORICAL VOLUME (MCF/D)
Terrell Plant	0.45 102,708

3.3 Delivery Specifications. Except as otherwise provided below, all Natural Gas delivered by Transporter shall conform to the following specifications:

- (a) Liquids - The gas shall be free of water and hydrocarbons in liquid form at the temperature and pressure at which the gas is delivered. The gas shall in no event contain water vapor in excess of seven (7) pounds per million standard cubic feet.

3.3 Delivery Specifications (continued)

- (b) Hydrocarbon Dew Point - The hydrocarbon dew point of the gas delivered shall not exceed twenty degrees Fahrenheit (20°F) at a pressure of 600 psig.
- (c) Total Sulfur - The gas shall not contain more than three-quarters (0.75) grain of total sulfur per one hundred (100) standard cubic feet, which includes hydrogen sulfide, carbonyl sulfide, carbon disulfide, mercaptans, and mono-, di- and poly-sulfides. The gas shall also meet the following individual specifications for hydrogen sulfide, mercaptan sulfur or organic sulfur:
 - (i) Hydrogen Sulfide - The gas shall not contain more than one-quarter (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet.
 - (ii) Mercaptan Sulfur - The mercaptan sulfur content shall not exceed more than three-tenths (0.3) grain per one hundred (100) standard cubic feet.
 - (iii) Organic Sulfur - The organic sulfur content shall not exceed five-tenths (0.5) grain per one hundred (100) standard cubic feet, which includes mercaptans, mono-, di- and poly-sulfides, but it does not include hydrogen sulfide, carbonyl sulfide or carbon disulfide.
- (d) Oxygen - The oxygen content shall not exceed two-tenths of one percent (0.2%) by volume and every reasonable effort shall be made to keep the gas delivered free of oxygen.
- (e) Carbon Dioxide - The gas shall not have a carbon dioxide content in excess of three percent (3%) by volume.
- (f) Diluents - The gas shall not at any time contain in excess of four percent (4%) total diluents (the total combined carbon dioxide, nitrogen, helium, oxygen, and any other diluent compound) by volume.
- (g) Dust, Gums and Solid Matter - The gas shall be commercially free from solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with the intended purpose or merchantability of the gas, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow.
- (h) Heating Value - The gas shall have a Heating Value of not less than 967 Btu per cubic foot. For Natural Gas delivered at the border between the States of Arizona and California, the gas shall have a Heating Value of not less than 995 Btu per cubic foot.

3.3 Delivery Specifications (continued)

- (i) Temperature - The gas shall be delivered at temperatures not in excess of one hundred twenty degrees Fahrenheit (120°F) nor less than fifty degrees Fahrenheit (50°F) except during those times when due to normal operating conditions and/or seasonal ambient temperatures on or near the pipeline system the temperature may drop below such lower limit.
- (j) Deleterious Substances - The gas shall not contain any toxic or hazardous substance, in concentrations which, in the normal use of the gas, may be hazardous to health, injurious to pipeline facilities or be a limit to merchantability.
- (k) If, at any time, gas delivered by Transporter shall fail to substantially conform to the specifications set forth in this Section 3.3 (a) - (j) of the GT&C, Shipper or its designee agrees to notify Transporter of such deficiency. Shipper, or its designee, may agree to waive Transporter's compliance with its delivery specifications or, if Transporter fails to promptly remedy any such deficiency within a reasonable time, then Shipper or its designee may, at its option, refuse to accept delivery pending correction of the deficiency by Transporter or continue to accept delivery and make such changes as necessary to cause the gas to conform to such specifications, in which event Transporter shall reimburse Shipper or its designee for all reasonable expenses incurred by Shipper or its designee in effecting such changes.

- 3.4 Specification Exemptions. Transporter, in its reasonable discretion and judgment, exercised on a not unduly discriminatory basis, may accept gas that does not conform to the quality specifications in Section 3.1 or 3.2 of the GT&C but meets the conditions set forth below, provided that Transporter determines that such acceptance will not interfere with its ability to: (1) maintain an acceptable gas quality in its pipeline through prudent and safe operation of Transporter's pipeline system and any related storage facility; (2) ensure that such gas does not adversely affect Transporter's ability to operate its system and to provide adequate service to its customers consistent with the applicable Rate Schedule and the GT&C; and (3) ensure that such gas does not adversely affect Transporter's ability to deliver gas at its Delivery Points.

- (a) Transporter may accept gas that exceeds the total diluents specifications as set forth in Section 3.1(f) in Lea, Chaves, and San Juan Counties, New Mexico provided that: (i) the maximum quantity received is no greater than 6,000 Mcf/day; (ii) total diluents are no greater than 6.0%; (iii) the gas meets all other gas quality specifications set forth in Section 3.1; (iv) received volumes will not impact the merchantability of the commingled gas stream; and (v) the Shipper or Operator has provided Transporter with written notice of its intent to deliver gas pursuant to this exemption

Attachment "B"



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☐ Revised ☒ for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Yuma Cogeneration Associates Facility (Source) Name	Arizona State	54694 Plant Code
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STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
4101	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Permit Requirements

STEP 3

Read the standard requirements.

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

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Sulfur Dioxide Requirements. Cont'd.**STEP 3, Cont'd.**

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

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

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

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

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

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

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

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

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

Recordkeeping and Reporting Requirements

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

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

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements. Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

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

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities. Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

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

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

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

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

STEP 4

Read the certification statement, sign, and date.

Certification

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

Name Lawrence Ornellas	
Signature <i>Lawrence Ornellas</i>	Date 05/05/25

Attachment “C”

Insignificant Activities

Activity	Insignificant Yes / No	Reason and Applicable Regulation
Natural gas piping	Yes	A.A.C. R18-2-101.68 a
Internal combustion engine driven fire water pump for emergency services	No	Applicable requirements in A.A.C. R18-2-719
Water treatment and cooling systems for process water	Yes	A.A.C. R18-2-101.68 a
Storage of sulfuric acid (93%)	Yes	A.A.C. R18-2-101.68 a
Storage of sodium hydroxide (50%)	Yes	A.A.C. R18-2-101.68 a
Storage of Nalco 8103 coagulant (Polyquaternary Amine)	Yes	A.A.C. R18-2-101.68 a
Storage of Nalco 356 Corrosion Inhibitor (Cyclohexylamine & Morpholine)	Yes	A.A.C. R18-2-101.68 a
Storage of Nalco BT-2600 feed water treatment Tri- Sodium Phosphate	Yes	A.A.C. R18-2-101.68 a
Storage of Nalco BT-1000 feed water treatment Di-Sodium Phosphate	Yes	A.A.C. R18-2-101.68 a
Eliminox oxygen scavenger (modified amino compounds)	Yes	A.A.C. R18-2-101.68 a
Nalco 90005 microbiocide	Yes	A.A.C. R18-2-101.68 a
Nalco 73551 Bio-Detergent	Yes	A.A.C. R18-2-101.68 a
General office activities and maintenance	Yes	A.A.C. R18-2-101.68 f
Restroom facilities and associated cleanup operations	Yes	A.A.C. R18-2-101.68 f
Air conditioning in office	Yes	A.A.C. R18-2-101.68 a
Maintenance & repair of emission units & equipment	Yes	A.A.C. R18-2-101.68 a
Circuit breakers	Yes	A.A.C. R18-2-101.68 a
Nalco 3DT-289 Trasar Dispersant	Yes	A.A.C. R18-2-101.68 a
Nalco N-1801 (corrosion inhibitor)	Yes	A.A.C. R18-2-101.68 a
Nalco PC-191 Anti-Scalant	Yes	A.A.C. R18-2-101.68 a