



## **APPLICATION COMPLETENESS CHECKLIST**

### **GENERAL PERMIT – CONCRETE BATCH PLANTS**

**Before submitting this application to ADEQ, please ensure that you have completed the following: (PLEASE CHECK THE BOXES AND ATTACH THE COMPLETED FORM TO THE APPLICATION)**

- The Standard Permit Application (Form 1 – Page 7) has been completed and signed by the Responsible Official (see page 6 for definition of “Responsible Official”).
- Verified that the business name identified in Item #1 of the Standard Permit Application (Form 1 – Page 7) is registered with the Arizona Corporation Commission.
- The General Permit Application Fee of \$500 has been included in your submittal.
- The Responsible Official has signed the Compliance Certification and Certification of Truth, Accuracy, and Completeness (Form 5 - Page 22).
- The Determination of Coverage Eligibility has been completed (Form 2 – Pages 8 and 9).
- Emission calculations have been completed for all applicable equipment using the maximum rated capacity for each piece of equipment (Form 3 – Pages 10 to 20).
- The Equipment List has been completed identifying all equipment which will be covered by this General Permit. This includes type of equipment, maximum rated capacity, make, model, serial number, type of fuel used, date or year of manufacture, and equipment identification number (Form 4 - Page 21).

**APPLICATION PACKET  
FOR A  
CONCRETE BATCH PLANT  
GENERAL PERMIT**



**Arizona Department of Environmental Quality**

**Air Quality Division**

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## I. INTRODUCTION

This application has been developed specifically for applicants pursuing coverage under the Concrete Batch Plant General Permit in lieu of an individual permit. To expedite the processing of an air quality control permit application, the Arizona Department of Environmental Quality (ADEQ) has created a general permit for Concrete Batch Plants. Facilities, which meet the criteria in this general permit application, will be permitted under the Concrete Batch Plant General Permit and will pay lower annual air quality fees than Concrete Batch Plants covered under individual air quality permits.

This application packet assists the applicant in the submittal of information that is required to process their application for an air quality control permit. Applicants wishing to obtain a Concrete Batch Plant General Permit shall apply to ADEQ, except for facilities solely located on an Indian Reservation or in Pima, Pinal, or Maricopa Counties, for which, the local air quality agency will process the air quality permit application. However, if the facility is located in Pima, Pinal, or Maricopa Counties and will be moved within the state, the applicant shall apply to ADEQ. If the applicant has any questions regarding jurisdictional issues, please contact the appropriate agency at the phone number below:

**ADEQ:** 1-800-234-5677 ext 771-2337

**Maricopa County:** (602) 506-6010

**Pima County:** (520) 243-7400

**Pinal County:** (520) 866-6929

### A. APPLICABILITY

1. The Concrete Batch Plant General Permit, hereafter referred to as the General Permit, covers “stand-alone” stationary and portable plants (those which are not located on contiguous or adjacent property with a supporting crushing and screening or hot mix asphalt plant).
2. The General Permit allows for portable concrete batch plants to move to other locations statewide, unless prohibited below.
3. Operations under this general permit are prohibited in a portion of Pinal County identified in the map in Form 7. Additionally, operations are prohibited in portions of the Nogales area in the southern part of Santa Cruz County as shown on the map in Form 8 between October 1<sup>st</sup> and March 31<sup>st</sup> if the Nogales particle pollution risk forecast at <http://www.azdeq.gov/envirom/air/ozone/nogales.pdf> shows the risk of unhealthy particulate matter concentration to be “High” or if the Air Quality Index (AQI) for PM<sub>2.5</sub> is forecast as “Unhealthy for Sensitive Groups”
4. This General Permit applies only to the emission units listed in Table 1 below:

*Table 1: Equipment and Activities Covered Under This General Permit*

Concrete Batch Plant <sup>1</sup> Stand-Alone Silos <sup>2</sup> Baghouses <sup>3</sup> Elevated Storage Bins Boilers <sup>5</sup>	Internal Combustion Engines (Generator) <sup>4</sup> Storage Piles Vehicular Traffic Wash Plant Direct-Fired Fuel Burning Equipment
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1. Includes connected conveyor systems and feed hoppers, enclosed augers and silos, weigh hoppers, and mixers.
2. Includes attached baghouse and pneumatic or bucket loading system.
3. Those not attached to a silo.
4. Each internal combustion engine will be issued an individual ATO, except those which are integrated into conveyors. Total maximum capacity of all generators at the facility is limited by the hours stipulated in the ATOs.

5. Total maximum capacity of all boilers at the facility is limited to 10 Million British Thermal Unit(s) (MMBtu) per hour or less.
6. The Permittee will be required to limit the daily concrete production rate to 2,000 cubic yards per day (yds<sup>3</sup>/day).
7. If operating in Maricopa County, the Permittee shall not operate any non-certified engines that are cumulatively greater than 750 horsepower. A non-certified engine is any engine that is not certified by the manufacturer to meet at least a Tier 1 emission standard or better in accordance with 40 CFR 89.112(a).
8. The Permittee shall limit the operation of the equipment at the facility to the hours stipulated in the ATOs. This does **not** include mobile equipment such as trucks and front-end loaders.
9. The Permittee shall limit the total maximum capacity of all boilers to 10 MMBtu per hour.
10. Sources planning to operate solely in Maricopa, Pima or Pinal Counties during the entire permit term need to obtain an individual or a general permit from the Maricopa County Air Quality Department (AQD), Pima County Air Quality Control District (AQCD), or Pinal County AQCD respectively. **The Permittee shall not operate a facility under both a County Air Quality Control Permit and a State Air Quality Control Permit at the same time.**

#### B. AUTHORIZATIONS TO OPERATE

1. Any source which is qualified to be covered by this General Permit may apply to the Arizona Department of Environmental Quality (the Department) for authority to operate under this General Permit. Applicants shall submit the application forms and necessary information included in Appendix 1 of the Arizona Administrative Code (A.A.C.) Title 18, Chapter 2.
2. If the applicant meets the criteria for coverage under this General Permit, an Authorization To Operate (ATO) will be issued for each concrete batch plant equipment (which includes connected conveyor systems and feed hoppers, enclosed augers and silos, weigh hoppers, and mixers), stand-alone silo (which includes attached baghouse and pneumatic or bucket loading system), boiler, and internal combustion engine (except those which are integrated into conveyors). The ATOs attest to the parties' formal agreement to abide by all conditions contained in the General Permit. Other associated pieces of equipment do not require an individual ATO but are subject to the provisions of this General Permit when associated with concrete production activities.

#### C. JURISDICTION

##### 1. Stationary Sources

Stationary sources wishing to obtain coverage under this General Permit and associated ATOs will be required to apply to ADEQ, except for stationary sources which are located in Maricopa, Pima or Pinal Counties. These stationary sources will be required to obtain a permit from the respective programs.

##### 2. Portable Sources

- a. A portable source is any stationary source which is capable of being transported and operated in more than one county of Arizona.
- b. According to Arizona Revised Statutes (A.R.S.) §49-402, portable sources wishing to obtain coverage under this General Permit will be required to apply to ADEQ. However, if the portable source will operate for the remaining term of this General Permit in Maricopa, Pima or Pinal Counties, then the respective programs will process the application for a permit.

## II. APPLICATION INSTRUCTIONS

This section helps the applicant assemble a complete application. Please read all of the following sections very carefully and provide all information requested. The final application should include all the forms in the application packet and any attachments necessary to provide all information (i.e. map, plot plan, etc.). Please make additional copies of the forms as necessary to ensure that all of the required information is included. Please ensure that the Responsible Official signs Form 1 and Form 5 of your application.

### A. STEP 1: Standard Permit Application Form

1. To apply for a general permit or to add equipment to an issued general permit, applicants must submit the Standard Permit Application Form and follow the Filing Instructions. The first step to fulfilling the submittal requirements for coverage under the General Permit is properly completing Form 1 "Standard Permit Application Form". Lines 1 through 5 of the application form are self-explanatory. The rest are explained below in detail:
  - a. Line #6 asks for the Plant/Site Manager or Contact Person. This should be the person which ADEQ may contact to request additional information.
  - b. Line #7 is necessary to determine the location of the plant (or initial location if portable). The township, range and section may be substituted for the latitude and longitude coordinates (degrees, minutes and seconds).
  - c. Line #8, the "Equipment Name, Purpose, and Equipment List and Description" should describe what is produced at the plant, and should list the equipment on site.
  - d. Under Line #9, if the "Other" box is checked, please be specific as to the type of organization.
  - e. Line #10 asks for the Permit Application Basis that indicates what type of permit is necessary. The following steps should be utilized when filling out Line #10:
    - (1) If the equipment has never been permitted, then the boxes titled "New Source" and "General Permit" should be checked.
    - (2) If the equipment is already permitted under an individual permit and you are applying for coverage under the General Permit, then the boxes titled "Renewal of Existing Permit" and "General Permit" should be checked, and the current permit number must be included on the line titled "For renewal or modification, include existing permit number".
    - (3) If you have a group of equipment covered by the General Permit and you are adding additional equipment, then the boxes titled "Revision" and "General Permit" should be checked, and the current General Permit Number(s) must be included on the line titled "For renewal or modification, include existing permit number(s)".
    - (4) If the equipment is portable, then the box titled "Portable Source" should be checked.
    - (5) For new sources the "Date of Commencement of Construction or Modification" is the expected date that construction will begin. For existing sources this date need not be defined.
    - (6) If there is any chance that the equipment will be leased out, answer "yes" in the

appropriate box.

- (7) The "Standard Industrial Classification Code" for concrete batch plants is **3273**.
- (8) The "State Permit Class" for concrete batch plants utilizing this application packet is "**General**".

f. The "Responsible Official" referred to in Line #11 is the owner or a partner of the company in most cases. It may also be the president, secretary, treasurer or vice-president of larger companies. If there is a question as to who the responsible official is, contact ADEQ for more information.

B. STEP 2: Determination of Coverage Eligibility

Coverage eligibility to operate under the general permit must be determined. Form 2 is used for this determination - please complete sections A through M of Form 2 as accurately as possible.

C. STEP 3: Emission Calculations

The amount of pollution emitted from the concrete batch plant operations, internal combustion engines, and boilers must be submitted. Form 3 should be used to calculate these emissions. The emission factors in this application are based on EPA's Air Pollution Engineering Manual, AP-42 (Sections 1.3, 1.4, 1.5, 3.2-2, 3.3, 3.4, 11-12, 13.2-1 and 13.2-2) and include the use of wet suppression.

D. STEP 4: Equipment List

1. ADEQ needs to be able to identify all pieces of equipment covered under the General Permit. Use Form 4 to provide a list of all equipment to be permitted including control equipment and internal combustion engines (this does not include internal combustion engines associated with motor driven vehicles or internal combustion engines that are non-road engines). **The list should include the type of equipment, make, model, maximum rated capacity, serial number, manufacture date, and equipment identification number (if available) of each piece of equipment.** The equipment identification number is one which the source assigns to permitted equipment on site for purposes of identifying equipment. Please make additional copies of Form 4 if necessary.
2. If the equipment has not been purchased at the time of application, the serial number does not have to be listed, but an equipment identification number must be provided. The equipment identification number must be clearly stenciled on each piece of equipment that is to be permitted before such equipment is installed.
3. **THE DEPARTMENT WILL NOT BE ABLE TO PROCESS YOUR APPLICATION UNLESS, AT A MINIMUM, THE FOLLOWING INFORMATION IS PROVIDED ON THE EQUIPMENT LIST: MAXIMUM RATED CAPACITY, SERIAL NUMBER OR EQUIPMENT ID, AND THE DATE OF MANUFACTURE FOR ALL EQUIPMENT.**

E. STEP 5: Compliance Certification and Certification of Truth, Accuracy and Completeness

A Compliance Certification and Certification of Truth, Accuracy and Completeness must be signed and submitted by all applicants. Form 5 should be used to submit a complete compliance certification for this general permit application.

F. STEP 6: Filing Instructions

1. An application fee of \$500 must be submitted by all applicants requesting a new or renewal

permit and by applicants requesting an equipment change. Please make your check or money order payable to ADEQ. The application fee must accompany each application submittal.

2. Please mail the completed application and the \$500 application fee to the following address:

Arizona Department of Environmental Quality  
Air Quality Division  
1110 West Washington  
Phoenix, Arizona 85007

3. Please remember to make photo copies of Forms 1 through 5 of the application packet for your records before mailing.

**III. Form 1: Standard Permit Application**  
**Arizona Department Of Environmental Quality**  
**Air Quality Division**  
**1110 West Washington ♦ Phoenix, AZ 85007 ♦ Phone: (602) 771-2338**

**STANDARD 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: (Registered business license name of organization with the Arizona Corporation Commission that is to receive permit)  
\_\_\_\_\_
2. Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
3. Previous Company Name: (if applicable) \_\_\_\_\_
4. Name (or names) of Owners/Principals: \_\_\_\_\_  
Phone #: \_\_\_\_\_ FAX: \_\_\_\_\_ Email: \_\_\_\_\_
5. Name of Owner's Agent: \_\_\_\_\_  
Phone #: \_\_\_\_\_ FAX: \_\_\_\_\_ Email: \_\_\_\_\_
6. Plant/Site Manager/Contact Person and Title: \_\_\_\_\_  
Phone #: \_\_\_\_\_ FAX: \_\_\_\_\_ Email: \_\_\_\_\_
7. Plant Site Name: \_\_\_\_\_  
Plant Site Location/Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ Zip: \_\_\_\_\_  
Indian Reservation (if applicable, which one): \_\_\_\_\_  
Latitude/Longitude, Elevation: \_\_\_\_\_
8. Equipment Purpose: \_\_\_\_\_  
Equipment List/Description: \_\_\_\_\_  
\_\_\_\_\_
9. Type of Organization:  
 Corporation                       Individual Owner  
 Partnership                       Government Entity (Government Facility Code: \_\_\_\_\_)  
 Other \_\_\_\_\_
10. Permit Application Basis:  New Source     Renewal of Existing Permit                       Revision (Equipment Change)  
(Check all that apply.)                       Portable Source                       General Permit  
For renewal or modification, include existing permit number(s) (and expiration date(s)): \_\_\_\_\_  
Date of Commencement of Construction or Modification: \_\_\_\_\_  
Is **any** of the equipment to be leased to another individual or entity?     Yes     No  
Standard Industrial Classification Code: \_\_\_\_\_ **3273**                      State Permit Class: \_\_\_\_\_ **General**
11. **Signature of Responsible Official of Organization:** \_\_\_\_\_  
Official Title of Signer: \_\_\_\_\_
12. Typed or Printed Name of Signer: \_\_\_\_\_  
Date: \_\_\_\_\_ Telephone Number: \_\_\_\_\_ Email: \_\_\_\_\_

#### IV. Form 2: Determination of Coverage Eligibility

This section guides the applicant through a series of questions to determine coverage eligibility. If the applicant fails any of the eligibility criteria, then this general permit application cannot be used and the Standard Permit Application package must be completed.

- A. Will the facility operate the concrete batch plant being permitted here with any other concrete batch plant, crushing and screening plant, or hot mix asphalt plant that meet the definition of a stationary source?  
Yes  No

**If Yes**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please contact the Air Quality Permits Section to obtain coverage under an individual permit.

**If No**, proceed to question B.

- B. Will you operate exclusively in Maricopa, Pima or Pinal County through the permit term? Yes  No

**If Yes**, you are not under ADEQ jurisdiction. Please contact the Maricopa, Pima or Pinal County Department of Environmental Quality, as appropriate.

**If No**, proceed to question C.

- C. Are you willing to limit your maximum daily production to 2,000 cubic yards per day? Yes  No

**If Yes**, proceed to question D.

**If No**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

- D. If operating under generator power, in Maricopa County with a generator not certified to at least an EPA Tier 1 emission standard, are you willing to limit your cumulative horsepower to 750?  
Yes  No  N/A

**If Yes**, proceed to question E.

**If No**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

- E. If operating **inside of** Maricopa County, are you willing to limit the daily and annual hours of operation of the facility to the minimum number of hours calculated in Table 13 of Form 3? Yes  No  N/A

**If Yes**, proceed to question F.

**If No**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

**F.** While operating **outside of** Maricopa County, are you willing to limit the annual hours of operation of the facility to the minimum number of hours calculated in Table 12 of Form 3? Yes  No  N/A

**If Yes**, proceed to question G.

**If No**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

**G.** Do the internal combustion engine(s) burn any fuels other than diesel, natural gas, LPG (butane or propane) or gasoline? Yes  No

**If Yes**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

**If No**, proceed to question H.

**H.** If the facility has boilers, is the maximum capacity of all boilers used at the facility greater than or equal to 10 MMBtu/hr? Yes  No  N/A

**If Yes**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

**If No**, proceed to question I.

**If N/A**, the facility does not have any boilers, proceed to question J.

**I.** Do the boiler(s) burn any fuels other than diesel, natural gas or LPG (butane or propane), or on specification used fuel oil? Yes  No  N/A

**If Yes**, you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

**If No**, proceed to question J.

**J.** Table 2 must be completed in order for ADEQ to monitor miscellaneous source information specific to the applicant's batch plant operation.

***Table 2 Miscellaneous Source Information***

Number of Vehicle Miles Traveled by Front-End Loaders per Hour (VMT/hr):	
Number of Vehicle Miles Traveled by Ready-Mix Trucks per Hour (VMT/hr):	
Number of Storage Piles at the Plant:	
Number of Fly Ash Silos at the Plant:	
Number of Cement Silos at the Plant:	

V. Form 3: Emission Calculations

A. FACILITY-WIDE INTERNAL COMBUSTION ENGINES

The following emission factors should be used to estimate emissions from internal combustion engines (ICEs). Emissions, in pounds per hour, from the internal combustion engine(s) are calculated by multiplying total rated HP of each type of internal combustion engines as listed in (a) or (b) by the corresponding emission factor for each pollutant in column (c) or (d).

Table 3: Emissions from Diesel Fueled ICEs

**ICE Under 600 HP Using Diesel Fuel**

ICE 1: \_\_\_\_\_ HP      ICE 5: \_\_\_\_\_ HP  
 ICE 2: \_\_\_\_\_ HP      ICE 6: \_\_\_\_\_ HP  
 ICE 3: \_\_\_\_\_ HP      ICE 7: \_\_\_\_\_ HP  
 ICE 4: \_\_\_\_\_ HP      ICE 8: \_\_\_\_\_ HP  
**Total: \_\_\_\_\_ HP (a)**

**ICE Over 600 HP Using Diesel Fuel**

ICE 1: \_\_\_\_\_ HP      ICE 5: \_\_\_\_\_ HP  
 ICE 2: \_\_\_\_\_ HP      ICE 6: \_\_\_\_\_ HP  
 ICE 3: \_\_\_\_\_ HP      ICE 7: \_\_\_\_\_ HP  
 ICE 4: \_\_\_\_\_ HP      ICE 8: \_\_\_\_\_ HP  
**Total: \_\_\_\_\_ HP (b)**

Pollutant	Emission Factor		Emissions		Total Emissions from all ICEs
	Diesel Engines (Smaller than 600 HP)	Diesel Engines (larger than 600 HP)	Diesel Engines (Smaller than 600 HP)	Diesel Engines (larger than 600 HP)	
	Pounds per hp-hr		Pounds per hour		
	c	d	A = a x c	B = b x d	
PM	2.20E-03	7.00E-04			
PM <sub>10</sub>	2.20E-03	7.00E-04			
PM <sub>2.5</sub>	2.20E-03	7.00E-04			
CO	6.68E-03	5.50E-03			
NO <sub>x</sub>	3.10E-02	2.40E-02			
SO <sub>2</sub>	2.05E-03	6.47E-03			
VOCs	2.47E-03	7.05E-04			

**Table 4: Emissions from Gasoline Fueled ICEs**

**ICE Using Gasoline Fuel**

ICE 1: \_\_\_\_\_ HP  
 ICE 2: \_\_\_\_\_ HP  
 ICE 3: \_\_\_\_\_ HP

ICE 4: \_\_\_\_\_ HP  
 ICE 5: \_\_\_\_\_ HP  
 ICE 6: \_\_\_\_\_ HP

ICE 7: \_\_\_\_\_ HP  
 ICE 8: \_\_\_\_\_ HP  
 ICE 9: \_\_\_\_\_ HP

**Total: \_\_\_\_\_ HP (a)**

Pollutant	Emission Factor	Total Emissions from all ICEs
	Gasoline Engines	
	Pounds per hp-hr	
	<b>b</b>	
		Pounds per hour
		<b>E2 = a x b</b>
<b>PM</b>	7.21E-04	
<b>PM<sub>10</sub></b>	7.21E-04	
<b>PM<sub>2.5</sub></b>	7.21E-04	
<b>CO</b>	6.96E-03	
<b>NO<sub>x</sub></b>	1.10E-02	
<b>SO<sub>2</sub></b>	5.91E-04	
<b>VOCs</b>	2.16E-02	

*Table 5: Emissions from Natural Gas/LPG Fueled ICEs*

**ICE Using Natural Gas/LPG Fuel**

ICE 1: \_\_\_\_\_ HP

ICE 4: \_\_\_\_\_ HP

ICE 7: \_\_\_\_\_ HP

ICE 2: \_\_\_\_\_ HP

ICE 5: \_\_\_\_\_ HP

ICE 8: \_\_\_\_\_ HP

ICE 3: \_\_\_\_\_ HP

ICE 6: \_\_\_\_\_ HP

ICE 9: \_\_\_\_\_ HP

**Total:** \_\_\_\_\_ **HP (a)**

Pollutant	Emission Factor	Total Emissions from all ICEs
	Natural Gas/LPG Engines	
	Pounds per hp-hr	
	<b>b</b>	
PM	2.69E-04	
PM <sub>10</sub>	2.69E-04	
CO	2.60E-02	
NO <sub>x</sub>	2.86E-02	
SO <sub>2</sub>	4.12E-06	
VOCs	8.6E-04	

*Table 6: Total Emissions from all ICEs*

Pollutant	Total Emissions from Table 3 (E1)	Total Emissions from Table 4 (E2)	Total Emissions from Table 5 (E3)	Total Emissions from all ICEs * E4 = (E1 + E2 + E3 )
	Pounds per hour	Pounds per hour	Pounds per hour	Pounds per hour
PM				
PM <sub>10</sub>				
CO				
NO <sub>x</sub>				
SO <sub>2</sub>				
VOCs				

\* Total Emissions from Table 6 must be transferred to Facility Wide Total Emissions, Table 11.

**VI. FACILITY-WIDE BOILERS**

The following emission factors should be used to estimate emissions from the boilers. Total emissions, in pounds per hour, from the boiler(s) are calculated by multiplying the total heat rating of each type of boiler as listed in (a) by the corresponding emission factor for each pollutant in column (b).

*Table 7: Emissions from Diesel Fueled or On-Specification Used Oil Boilers*

**Boilers Using Diesel Fuel**

Boiler 1: \_\_\_\_\_ MMBtu/hr  
 Boiler 2: \_\_\_\_\_ MMBtu/hr  
 Boiler 3: \_\_\_\_\_ MMBtu/hr

Boiler 4: \_\_\_\_\_ MMBtu/hr  
 Boiler 5: \_\_\_\_\_ MMBtu/hr  
 Boiler 6: \_\_\_\_\_ MMBtu/hr

Boiler 7: \_\_\_\_\_ MMBtu/hr  
 Boiler 8: \_\_\_\_\_ MMBtu/hr  
 Boiler 9: \_\_\_\_\_ MMBtu/hr

**Total:** \_\_\_\_\_ MMBtu/hr (a)

Pollutant	Emission Factor	Total Emissions from all Diesel or On-Specification Used Oil Boilers
	Diesel or On-Specification Used Oil Boiler	
	Pounds per MMBtu	
	<b>b</b>	
		Pounds per hour
		<b>E5 = a x b</b>
<b>PM</b>	1.43E-02	
A. <b>PM<sub>10</sub></b>	1.43E-02	
B. <b>PM<sub>2.5</sub></b>	1.43E-02	
C. <b>CO</b>	3.57E-02	
D. <b>NO<sub>x</sub></b>	1.43E-01	
E. <b>SO<sub>2</sub></b>	1.52E-03	
<input type="checkbox"/> <b>VOCs</b>	2.43E-03	

**Table 8: Emissions from Natural Gas Fueled Boilers**

**Boilers Using Natural Gas Fuel**

Boiler 1: \_\_\_\_\_ MMBtu/hr      Boiler 4: \_\_\_\_\_ MMBtu/hr      Boiler 7: \_\_\_\_\_ MMBtu/hr  
 Boiler 2: \_\_\_\_\_ MMBtu/hr      Boiler 5: \_\_\_\_\_ MMBtu/hr      Boiler 8: \_\_\_\_\_ MMBtu/hr  
 Boiler 3: \_\_\_\_\_ MMBtu/hr      Boiler 6: \_\_\_\_\_ MMBtu/hr      Boiler 9: \_\_\_\_\_ MMBtu/hr

**Total:** \_\_\_\_\_ MMBtu/hr (a)

Pollutant	Emission Factor	Total Emissions from all Natural Gas Boilers
	Natural Gas	
	Pounds per MMBtu	
	<b>b</b>	
		Pounds per hour
		<b>E6 = a x b</b>
PM	7.45E-03	
PM <sub>10</sub>	7.45E-03	
PM <sub>2.5</sub>	7.45E-03	
CO	8.24E-02	
NO <sub>x</sub>	9.80E-02	
SO <sub>2</sub>	5.88E-04	
VOCs	5.39E-03	

**Table 9: Emissions from LPG/Propane Fueled Boilers**

**Boilers Using LPG/Propane Fuel**

Boiler 1: \_\_\_\_\_ MMBtu/hr      Boiler 4: \_\_\_\_\_ MMBtu/hr      Boiler 7: \_\_\_\_\_ MMBtu/hr  
 Boiler 2: \_\_\_\_\_ MMBtu/hr      Boiler 5: \_\_\_\_\_ MMBtu/hr      Boiler 8: \_\_\_\_\_ MMBtu/hr  
 Boiler 3: \_\_\_\_\_ MMBtu/hr      Boiler 6: \_\_\_\_\_ MMBtu/hr      Boiler 9: \_\_\_\_\_ MMBtu/hr

**Total:** \_\_\_\_\_ MMBtu/hr (a)

Pollutant	Emission Factor	Total Emissions from all LPG/Propane Boilers
	LPG/Propane Boilers	
	Pounds per MMBtu	
	<b>b</b>	
		Pounds per hour
		<b>E7 = a x b</b>
<b>PM</b>	7.65E-03	
<b>PM<sub>10</sub></b>	7.65E-03	
<b>PM<sub>2.5</sub></b>	7.65E-03	
<b>CO</b>	8.20E-02	
<input type="checkbox"/> <b>NO<sub>x</sub></b>	1.42E-01	
<b>SO<sub>2</sub></b>	8.74E-04	
<b>VOCs</b>	1.09E-02	

*Table 10: Total Emissions from all Boilers*

Pollutant	Total Emissions from Table 7 (E5)	Total Emissions from Table 8 (E6)	Total Emissions from Table 9 (E7)	Total Emissions from all ICEs* E8 = (E5 + E6 + E7)
	Pounds per hour	Pounds per hour	Pounds per hour	Pounds per hour
PM				
PM <sub>10</sub>				
CO				
NO <sub>x</sub>				
SO <sub>2</sub>				
VOCs				

\*Total Emissions from Table 10 must be transferred to Total Emissions, Table 11.

**VII. FACILITY-WIDE EMISSIONS**

Table 11 is for calculating facility-wide emissions and must be filled in with the calculated emissions from Table 6 and Table 10. These facility-wide emissions are used in Tables 12 and 13 to determine synthetic minor limitation for operating hours.

*Table 11: Facility-Wide Total Emissions*

Pollutant	Emissions from ICEs	Emissions from Boilers	Emissions from Concrete Batch Plants	Facility-wide Total Emissions
	(Total Emissions From Table 6)	(Total Emissions From Table 10)		
	Pounds per hour	Pounds per hour	Pounds per hour	Pounds per hour
PM			<b>2.6</b>	
PM <sub>10</sub>			<b>2.0</b>	
CO				
NO <sub>x</sub>				
SO <sub>2</sub>				
VOCs				

**VIII. STATEWIDE SYNTHETIC MINOR CALCULATIONS FOR OPERATIONS OUTSIDE OF MARICOPA COUNTY**

Table 12 is to be used for calculating synthetic minor hours limitations for the facility that will be operating statewide outside of Maricopa County. Facility-wide total emissions in Table 11 must be transferred to column (a) of Table 12 and utilized to calculate annual emissions and maximum allowed annual operating hours.

*Table 12: Synthetic Minor Hours Limitation – Statewide*

Pollutant	Facility Wide Emissions (From Table 11)	Potential Annual Emissions	Emission Limit	Maximum Allowed Annual Hours of Operation
	Pounds per hour	Tons per year	Tons per year	Hours * (If calculated value is greater than 8,760, please enter 8,760)
	<b>a</b>	<b>b = a x 4.38</b>	<b>c</b>	<b>d = c/b x 8760</b>
PM <sub>10</sub>			90	
CO			90	
NO <sub>x</sub>			90	
SO <sub>2</sub>			90	
VOCs			90	

\* The synthetic minor limitation for operating hours for the facility is the **lowest number** in column d or 8,760, whichever is less.

**IX. STATEWIDE SYNTHETIC MINOR CALCULATIONS FOR OPERATIONS IN MARICOPA COUNTY**

Table 13 is to be used for calculating synthetic minor hour limitations for the facility that will be operating in Maricopa County. Facility-wide emissions in Table 11 must be transferred to column ‘a’ of Table 13 and utilized to calculate daily & annual emissions and daily & annual operating hours.

*Table 13: Synthetic Minor Hours Limitation – Maricopa County*

Pollutant	Facility Wide Emissions			Emission Limits for Maricopa County		Limitation on Operating Hours in Maricopa County	
	Hourly Emissions (Pounds per hour)	Daily Emissions (Pounds per day)	Annual Emissions (Tons per year)	Daily Limits (Pounds per day)	Annual Limits (Tons per year)	Daily Hours Limitation * (Hours per day**)	Annual Hours Limitation* (Hours per year***)
	<b>a</b>	<b>b = a x 24</b>	<b>c = a x 4.38</b>	<b>d</b>	<b>e</b>	<b>F = d/b x 24</b>	<b>G = e/c x 8760</b>
<b>PM</b>				<b>135</b>	<b>22.5</b>		
<b>PM<sub>10</sub></b>				<b>76.5</b>	<b>13.5</b>		
<b>CO</b>				<b>495</b>	<b>90</b>		
<b>NO<sub>x</sub></b>				<b>135</b>	<b>22.5</b>		
<b>SO<sub>2</sub></b>				<b>135</b>	<b>22.5</b>		
<b>VOCs</b>				<b>135</b>	<b>22.5</b>		

\* The lowest numbers in Columns ‘F’ and ‘G’ are the Limitations on Daily and Annual Operating Hours for Maricopa County.

\*\* If calculated value is greater than 24, please enter 24. \*\*\*If calculated value is greater than 8,760, please enter 8,760.

**X. Form 4: Equipment List**

ADEQ needs to be able to identify all pieces of equipment covered under the General Permit. Please complete Form 4 to provide a detailed list of all pieces of equipment to be permitted, including control equipment and internal combustion engines. Please make additional copies of this form if necessary. **THE DEPARTMENT WILL NOT BE ABLE TO PROCESS YOUR APPLICATION UNLESS, AT A MINIMUM, THE FOLLOWING INFORMATION IS PROVIDED ON THE EQUIPMENT LIST BELOW: MAXIMUM RATED CAPACITY, SERIAL NUMBER OR EQUIPMENT ID, AND THE DATE OF MANUFACTURE FOR ALL EQUIPMENT.**

<sup>1</sup> Type of Equipment	Maximum Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment I.D. Number

<sup>1</sup> Generators being operated within Maricopa County must be certified to at least an EPA Tier 1 Emissions standard, or have a cumulative capacity of less than 750 Horsepower. Boilers must have a combined maximum capacity of less than 10 MMBtu/hr.

**XI. Form 5: Compliance Certification and Certification of Truth, Accuracy, and Completeness**

**This certification must be signed by the Responsible Official. Applications without a signed certification will be deemed incomplete.**

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 General Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the General Permit. I will present a certification of compliance to ADEQ no less than annually as stated in the Concrete Batch Plant General Permit, 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.

Typed or Printed Company Name: \_\_\_\_\_

Official Title of Responsible Official: \_\_\_\_\_

Typed or Printed Name of Responsible Official: \_\_\_\_\_

Signature of Responsible Official: \_\_\_\_\_ Date: \_\_\_\_\_

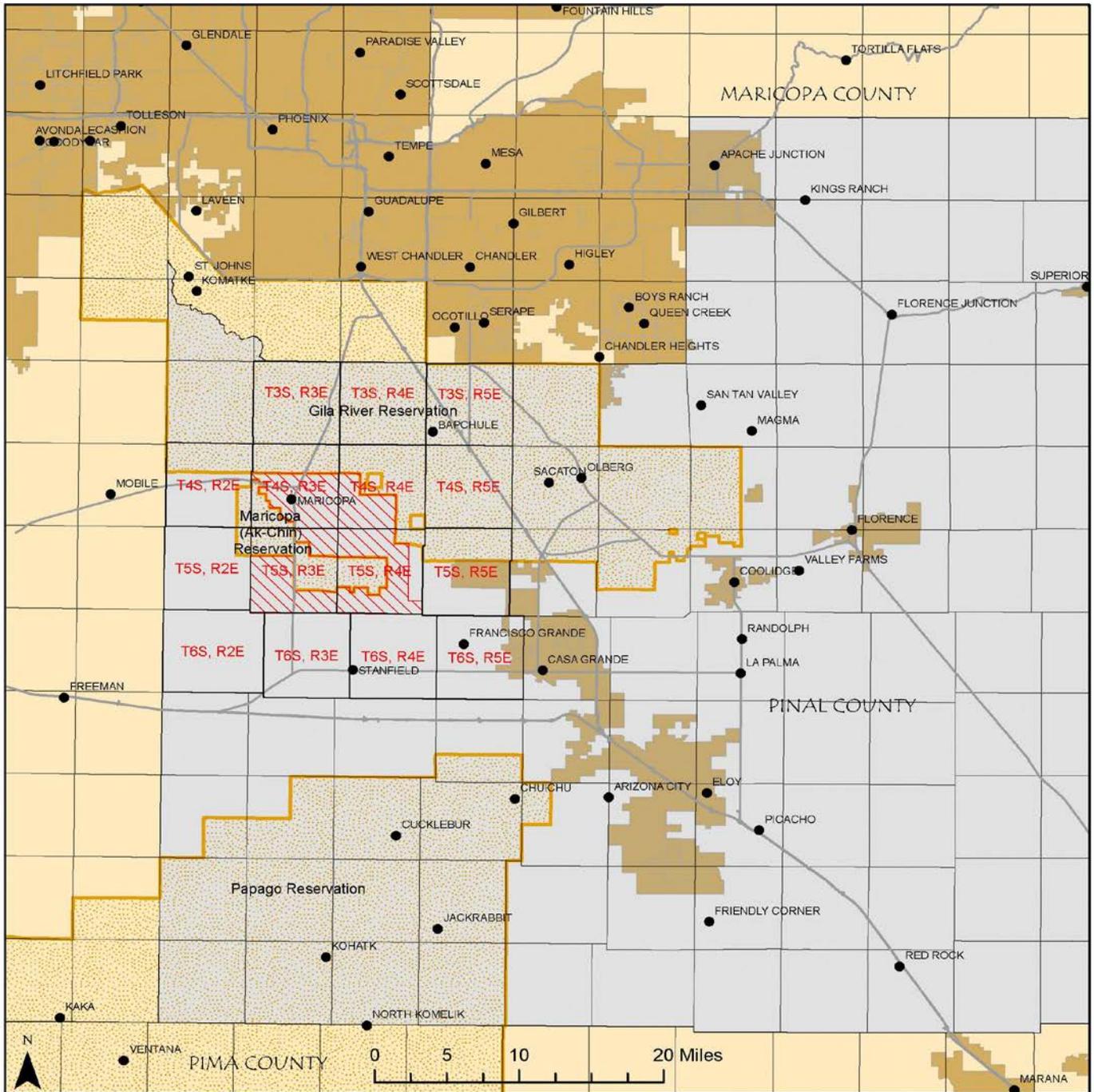
Pursuant to A.R.S. § 41-1030:

- (1) ADEQ shall not base a licensing decision, in whole or in part, on a requirement or condition not specifically authorized by statute or rule. General authority in a statute does not authorize a requirement or condition unless a rule is made pursuant to it that specifically authorizes the requirement or condition.
- (2) Prohibited licensing decisions may be challenged in a private civil action. Relief may be awarded to the prevailing party against ADEQ, including reasonable attorney fees, damages, and all fees associated with the license application.
- (3) ADEQ employees may not intentionally or knowingly violate the requirement for specific licensing authority. Violation is cause for disciplinary action or dismissal, pursuant to ADEQ's adopted personnel policy. ADEQ employees are still afforded the immunity in A.R.S. §§ 12-821.01 and 12-820.02.

**XII. Form 6: Fee Rule Summary for Concrete Batch Plant General Permits**

<b>SOURCE</b>			
<b>GENERAL PERMIT</b>			
<b>CLASS II</b>			
<b>TITLE V</b>		<b>NON - TITLE V</b>	
APPLICATION FEE \$500	<u><b>ANNUAL ADMINISTRATIVE FEE</b></u>  \$4,520	APPLICATION FEE \$500	<u><b>ANNUAL INSPECTION FEE</b></u>  \$3,020
There is a \$500 fee for facility changes that require the issuance of new Authorizations to Operate. There is no fee for transfers, administrative amendments, or facility change notices that do not require a permit revision. Administrative and Inspection fees are due no later than February 1 <sup>st</sup> of each year.			

### XIII. Form 7: Map of Pinal County Prohibited Area

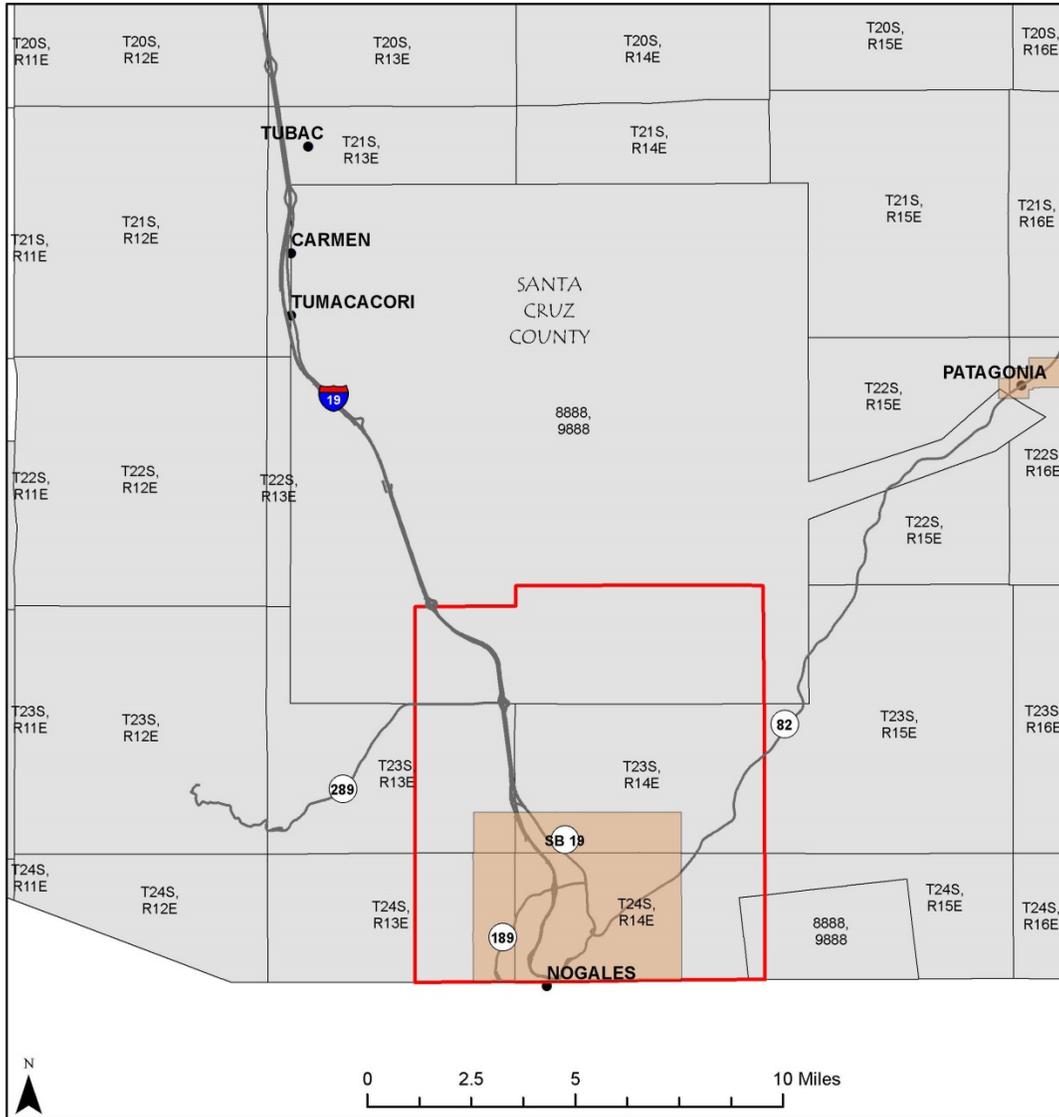


-  Prohibited\_Area\_Pinal
-  Pinal County
-  Native American Lands Pinal County
-  Towns
-  Highways
-  Cities
-  Township/Range
-  AZ Counties



DJCrouse: 4/16/2015  
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**XIV. Form 8: Map of the Santa Cruz Limited Coverage Area**



- Limited Prohibition Area
- Towns
- Cities
- Township Range
- Highways 82 19



DJCrouse: 4/23/2015

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