

**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 located on an Indian Reservation or 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 plant).
2. The General Permit allows for portable concrete batch plants to move to other locations statewide.
3. 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) / hr or less.
4. While operating in an attainment area, the Permittee will be required to limit the daily concrete production rate to one of the following scenarios:
    - a. A daily concrete production rate that does not exceed 1,280 yd<sup>3</sup> while operating under generator power.
    - b. A daily concrete production rate that does not exceed 1,310 yd<sup>3</sup> while operating under

commercial electric power.

5. While operating in a non-attainment area (including Maricopa County), the Permittee will be required to limit the daily concrete production rate to one of the following scenarios:
  - a. A daily concrete production rate that does not exceed 930 yd<sup>3</sup> while operating under generator power.
  - b. A daily concrete production rate that does not exceed 960 yd<sup>3</sup> while operating under commercial electric power.

The Permittee shall limit the operation of all internal combustion engines to the hours stipulated in the ATOs. This does **not** include mobile equipment such as trucks and front-end loaders. The Permittee shall limit the total maximum capacity of all boilers to **10** MMBtu/hr.

6. 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**

Maricopa County AQD and Pima and Pinal County AQCDs may administer and enforce this General Permit and issue ATOs for sources under their 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 AQD or AQCD.

### **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 AQD or AQCD will process the application for a permit.

- c. A portable source which has received coverage under this General Permit from Maricopa County AQD or Pima or Pinal County AQCDs is not allowed to operate in any other county, unless one of the following occurs:
  - i. If a portable source is proposing to operate in a county without an AQCD, then the portable source will be required to apply to ADEQ and obtain coverage under this General Permit before beginning operations in that county; or
  - ii. If a portable source is proposing to operate for the remaining term of this General Permit in another county with an AQD or AQCD, then the portable source will be required to apply to the respective AQD or AQCD and obtain a permit before beginning operations in that county.

#### **D. PERMIT ISSUANCE TIME FRAME**

According to A.A.C. R18-1-525, ADEQ has 21 business days to determine if the submitted general permit application is complete. Once the application is determined to be complete, the Department has 103 business days to make a licensing decision on the application. The counting of the days can be suspended by the Department upon the determination that additional information is needed. In such a case, a letter will be sent to the applicant informing them that the counting of days has been suspended, and will also specify what additional information is necessary to continue processing the application.

## **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 6 of your application.

### **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. 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:

- i. If the equipment has never been permitted, then the boxes titled "New Source" and "General Permit" should be checked.
  - ii. 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".
  - iii. 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)".
  - iv. If the equipment is portable, then the box titled "Portable Source" should be checked.
  - v. 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.
  - vi. If there is any chance that the equipment will be leased out, answer "yes" in the appropriate box.
  - vii. The "Standard Industrial Classification Code" for concrete batch plants is **3273**.
  - viii. The "State Permit Class" for concrete batch plants utilizing this application packet is "**Class II 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.

## **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.

## **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.

## **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. **The equipment type, maximum rated capacity, manufacture date and equipment identification number and serial number is the minimum required information for each piece of equipment listed on the equipment list.**

#### **STEP 5: Air Pollution Controls**

All pollution control equipment and pollution control procedures must be described in order to satisfy this submittal requirement. Form 5 can be used to submit the necessary pollution control information.

#### **STEP 6: 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 6 should be used to submit a complete compliance certification for this general permit application.

#### **STEP 7: 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 6 of the application packet for your records before mailing.

III. APPLICATION FORMS

Form 1: Standard Permit Application Form
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: Class II General
11. Signature of Responsible Official of Organization:
Official Title of Signer:
12. Typed or Printed Name of Signer:
Date: Telephone Number: Email:

**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.** Does the facility collocate a Crushing and Screening Plant or a Hot Mix Asphalt Plant with the Concrete Batch Plant? 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.** Will the concrete batch plant operate in Maricopa County or in any non-attainment area of Yuma, Pima, Santa Cruz, Gila/Pinal, or Cochise County (areas and townships are shown on Forms 8, 9, 10, 11 and 12)? Yes  No

**If Yes,** proceed to question D.  
**If No,** proceed to question G.

- D.** If operating under commercial power, in non-attainment areas, are you willing to limit your maximum daily production rate to **960** yd<sup>3</sup>/day? 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 under generator power, in non-attainment areas, are you willing to limit your maximum daily production rate to **930** yd<sup>3</sup>/day? 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 **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 G.  
**If No,** you do not qualify for coverage under the Concrete Batch Plant General Permit. Please complete an individual permit application package.

- G.** If operating under commercial power, in attainment areas, are you willing to limit your maximum daily production rate to **1,310** yd<sup>3</sup>/day? Yes  No  N/A

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

**H.** If operating under generator power, in attainment areas, are you willing to limit your maximum daily production rate to **1,280 yd<sup>3</sup>/day**? Yes  No  N/A

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

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

**I.** 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 J.

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

**J.** 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 K.

**K.** 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 L.

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

**L.** 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 M.

**M.** 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:	

**Form 3: Emission Calculations**

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

**ICE Over 600 HP Using Diesel 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  
**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		
	<b>c</b>	<b>d</b>	<b>A = a x c</b>	<b>B = b x d</b>	
<b>PM</b>	2.20E-03	7.00E-04			
<b>PM<sub>10</sub></b>	2.20E-03	7.00E-04			
<b>CO</b>	6.68E-03	5.50E-03			
<b>NO<sub>x</sub></b>	3.10E-02	2.40E-02			
<b>SO<sub>2</sub></b>	2.05E-03	6.47E-03			
<b>VOCs</b>	2.47E-03	7.05E-04			

**If there are no diesel fueled internal combustion engines (generators) on site, please check this box.**

**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>	
PM	7.21E-04	
PM <sub>10</sub>	7.21E-04	
CO	6.96E-03	
NO <sub>x</sub>	1.10E-02	
SO <sub>2</sub>	5.91E-04	
VOCs	2.16E-02	

**If there are no gasoline fueled internal combustion engines (generators) on site, please check this box.**

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

**ICE Using Natural Gas/LPG Fuel**

ICE 1: \_\_\_\_\_ MMBtu/hr      ICE 4: \_\_\_\_\_ MMBtu/hr      ICE 7: \_\_\_\_\_ MMBtu/hr  
 ICE 2: \_\_\_\_\_ MMBtu/hr      ICE 5: \_\_\_\_\_ MMBtu/hr      ICE 8: \_\_\_\_\_ MMBtu/hr  
 ICE 3: \_\_\_\_\_ MMBtu/hr      ICE 6: \_\_\_\_\_ MMBtu/hr      ICE 9: \_\_\_\_\_ MMBtu/hr      **Total: \_\_\_\_\_ MMBtu/hr (a)**

Pollutant	Emission Factor		Total Emissions from all ICEs
	Natural Gas/LPG Engines		
	Pounds per MMBtu		Pounds per hour
	<b>b</b>		<b>E3 = a x b</b>
PM	6.94E-05		
PM <sub>10</sub>	5.4E-07		
CO	2.22E-03		
NO <sub>x</sub>	2.86E-02		
SO <sub>2</sub>	4.12E-06		
VOCs	8.26E-04		

If there are no natural gas/LPG fueled internal combustion engines (generators) on site, please check this box.

*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.

**II. 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 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 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>	9.29E-03	
<b>PM<sub>10</sub></b>	9.29E-03	
<b>CO</b>	3.57E-02	
<b>NO<sub>x</sub></b>	1.43E-01	
<b>SO<sub>2</sub></b>	8.11E-01	
<b>VOCs</b>	2.43E-03	

**If there are no diesel or on-specification used oil fueled boilers on site, please check this box.**

**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	
CO	8.24E-03	
NO <sub>x</sub>	9.80E-02	
SO <sub>2</sub>	5.88E-04	
VOCs	5.39E-03	

**If there are no natural gas fueled boilers on site, please check this box.**

**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>
PM	7.73E-03	
PM <sub>10</sub>	7.73E-03	
CO	8.29E-02	
NO <sub>x</sub>	1.44E-01	
<input type="checkbox"/> SO <sub>2</sub>	8.84E-04	
VOCs	1.10E-02	

**If there are no LPG/Propane fueled boilers on site, please check this box.**

**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.

**III: 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>2.63</b>	
PM <sub>10</sub>			<b>1.09</b>	
CO				
NO <sub>x</sub>				
SO <sub>2</sub>				
VOCs				

**IV: 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.

**V: STATEWIDE SYNTHETIC MINOR CALCULATIONS FOR OPERATIONS IN MARICOPA COUNTY**

Table 13 is to be used for calculating synthetic minor hours 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.

**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.

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

**Form 5: Air Pollution Controls**

In order for ADEQ to fully evaluate a General Permit application, the type of air pollution controls utilized must be submitted. This section of the application is intended to assist the applicant in listing the air pollution controls that are utilized at the plant. Table 3 must be completed by check marking each emission point(s) with the appropriate air pollution control device. Generally emissions are controlled with spray bars, sprinkler systems and a water truck. In addition, some operators choose to use a chemical surfactant or dust palliative. Shaded boxes represent air pollution control devices which are typically not utilized with the referenced emission point(s).

*Table 14: Air Pollution Controls Checklist*

Air Pollution Control Device	EMISSION POINT								
	Material Handling (Front End Loaders)	Feed Hoppers	Elevated Bins/ Weigh Hoppers	Cement / Fly Ash Silo	Mixer Loading (Truck Mix)	Mixer Loading (Central Mix)	Transfer Points	Haul Roads	Storage Piles
Spray Bars									
Sprinklers									
Water Truck									
Water Hose									
Baghouse									
Other:									
Other:									

**Form 6: 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 Section VII.A of Attachment "A" of 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: \_\_\_\_\_

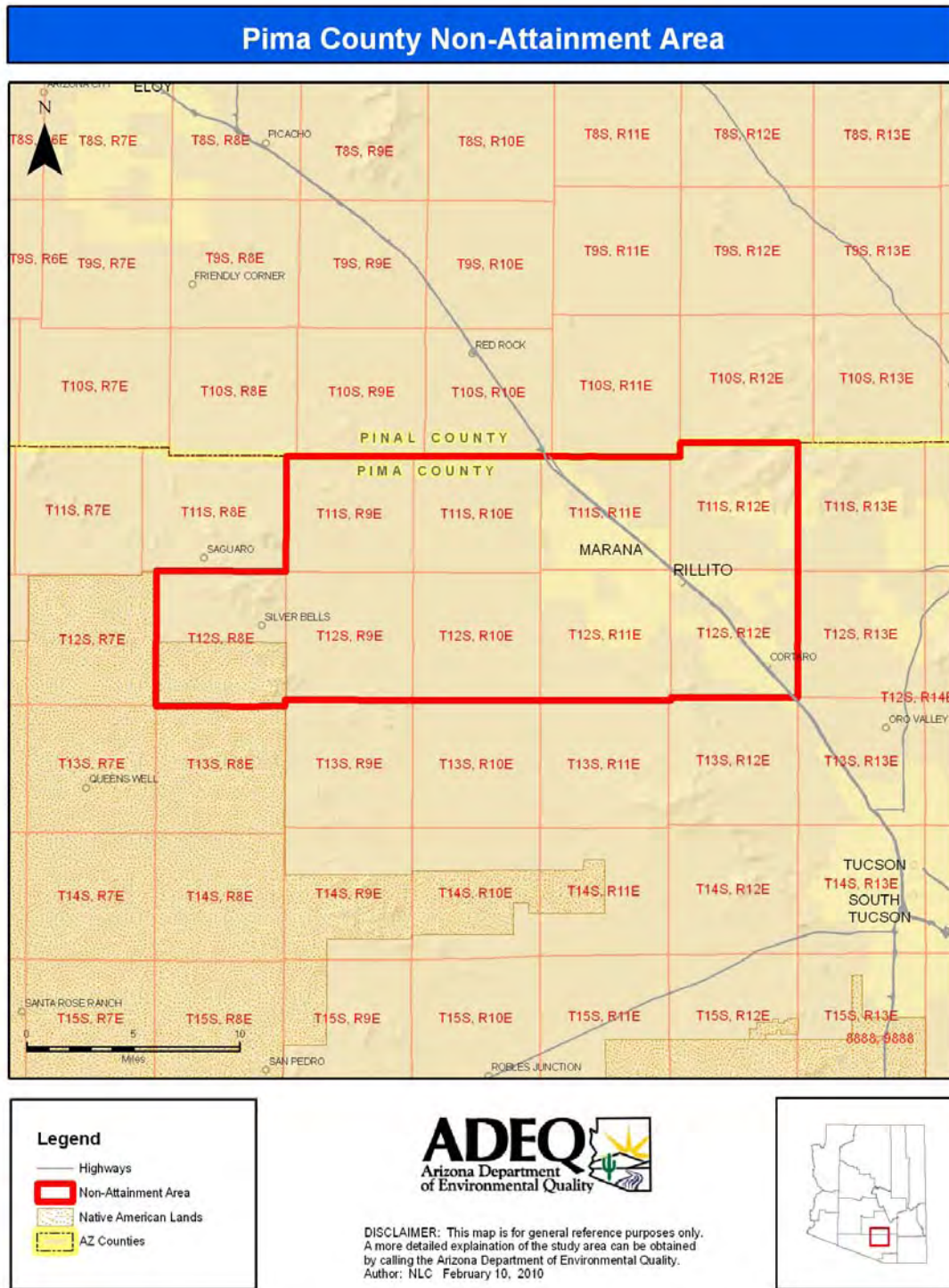
Typed or Printed Name of Responsible Official: \_\_\_\_\_

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

**Form 7: Fee Rule Summary for Concrete Batch Plant General Permits**

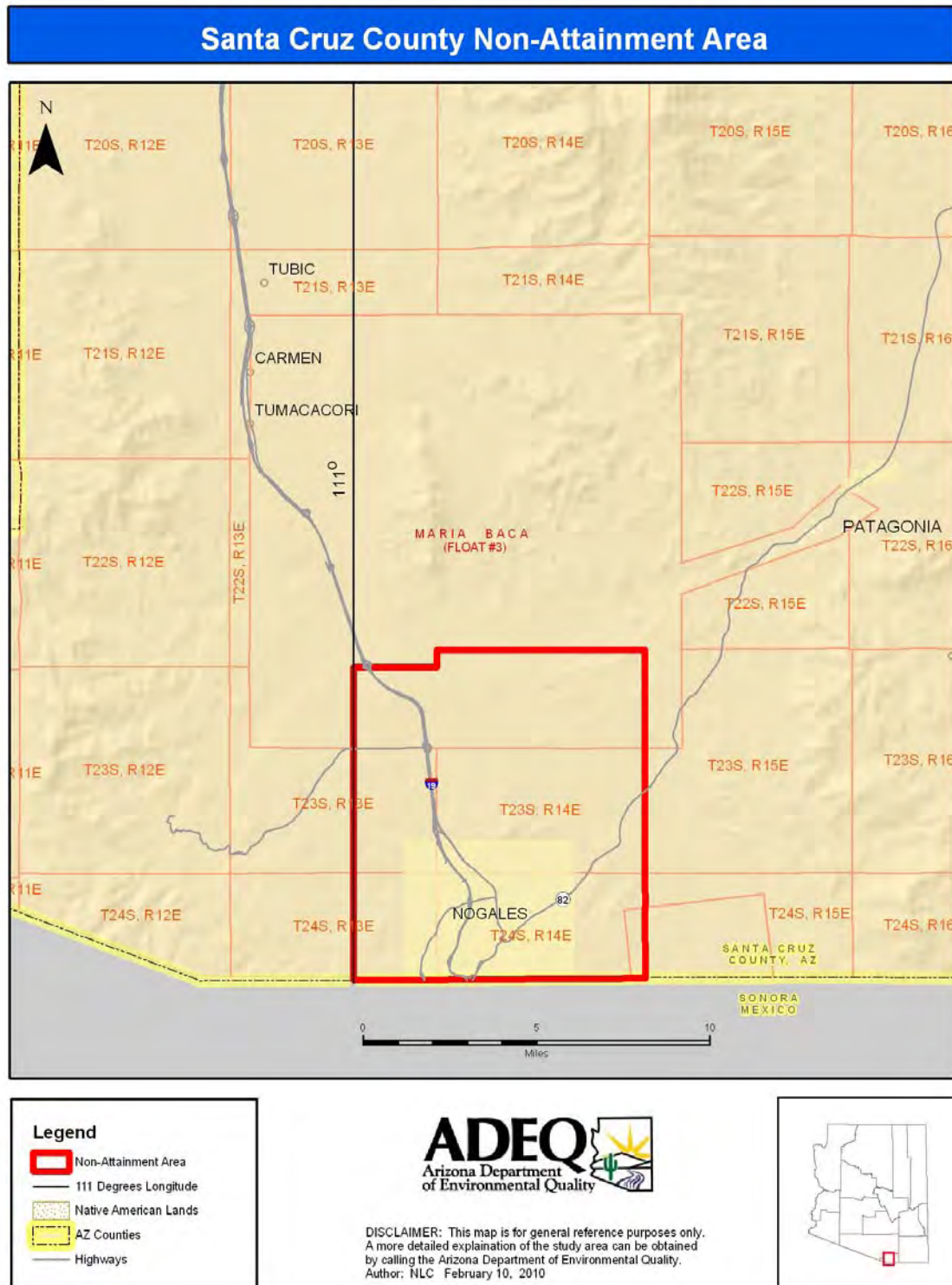
<b>SOURCE</b>			
<b>GENERAL PERMIT</b>			
<b>CLASS II</b>			
<b>TITLE V</b>		<b>NON - TITLE V</b>	
APPLICATION FEE \$500	<u><b>ANNUAL ADMINISTRATIVE FEE</b></u>  \$4,520	APPLICATION FEE \$500	<u><b>ANNUAL INSPECTION FEE</b></u>  \$3,020
There is a \$500 fee for facility changes that require the issuance 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.			

## Form 8: Map of Pima County PM<sub>10</sub> Non-Attainment Areas



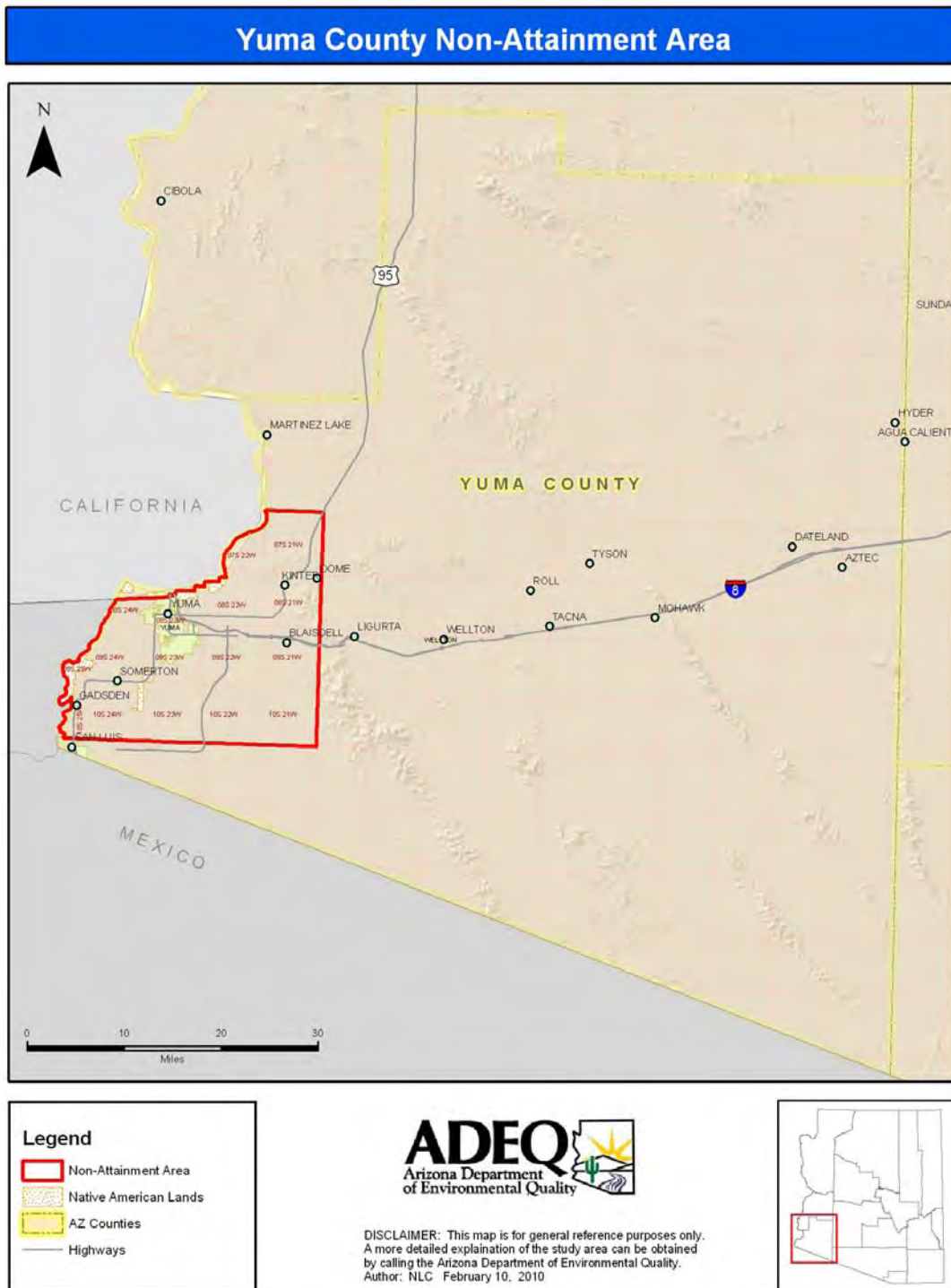
The red-boxed area represents the non-attainment areas of Pima County. The following townships are in a non-attainment area: T11S-R9E, T11S-R10E, T11S-R11E, T11S-R12E, T12S-R8E, T12S-R9E, T12S-R10E, T12S-R11E and T12S-R12E.

**Form 9: Map of Santa Cruz County PM<sub>10</sub> Non-Attainment Areas**



The red-boxed area represents the non-attainment areas of Santa Cruz County. The following townships are in a non-attainment area: T23S-R13E, T23S-R14E, T24S-R13E and T24S-R14E.

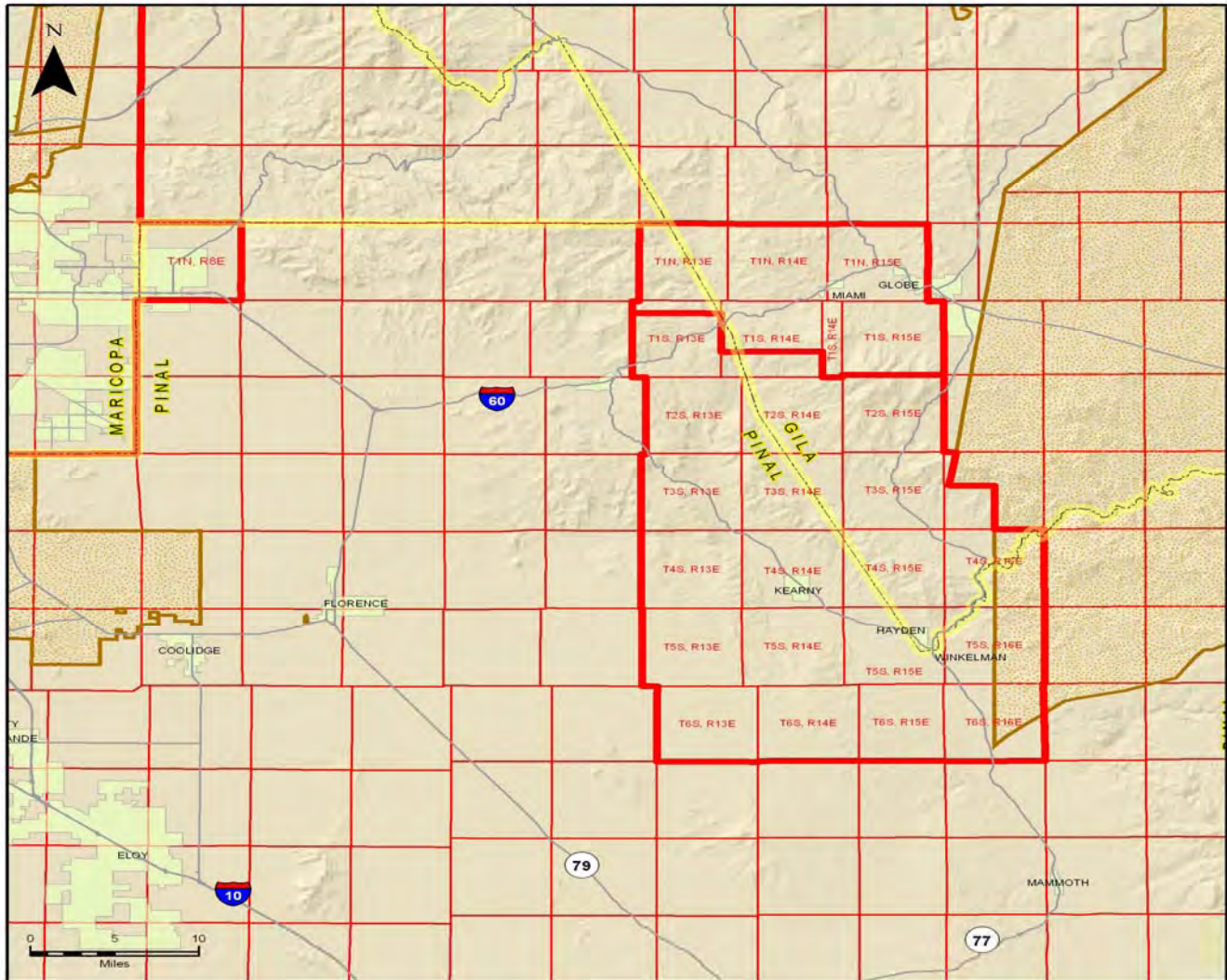
**Form 10: Map of Yuma County PM<sub>10</sub> Non-Attainment Areas**



The red-boxed area represents the non-attainment areas of Yuma County. The following townships are in a non-attainment area: T7S- R21W, R22W; T8S-R21W, R22W, R23W, R24W, T9S-R21W, R22W, R23W, R24W, R25W; T10S-R21W, R22W, R23W, R24W, and R25W.

**Form 11: Map of Gila County and Pinal County PM<sub>10</sub> Non-Attainment Areas**

**Pinal County PM10 Nonattainment Areas**



**Legend**

- PM 10 - Nonattainment Area
- Native American Lands
- AZ Counties

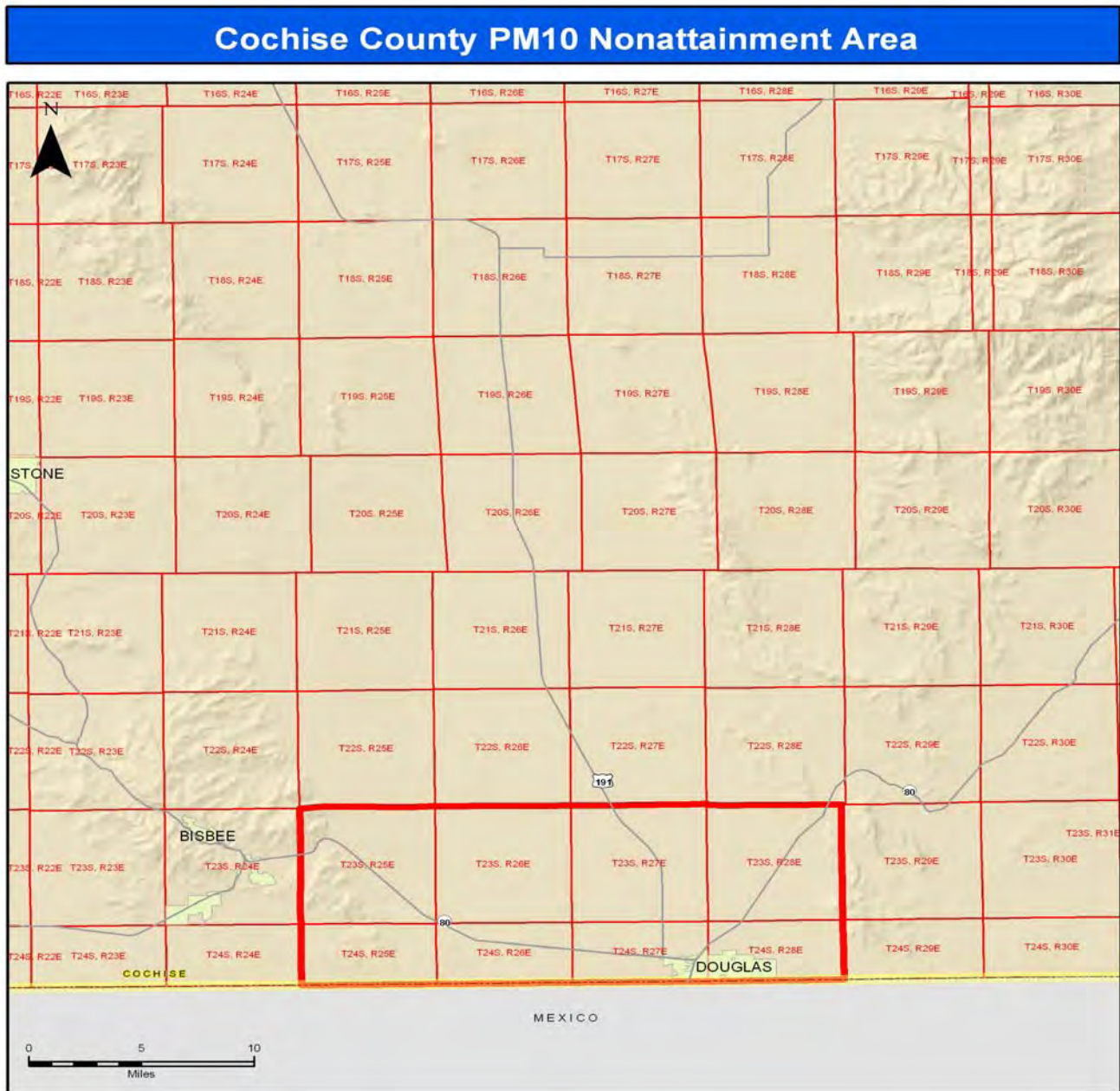


**DISCLAIMER:** This map is for general reference purposes only. A more detailed explanation of the study area can be obtained by calling the Arizona Department of Environmental Quality.  
 Author: NLC July 30, 2009



The red-boxed area represents the non-attainment areas of Gila and Pinal Counties. The following townships are in a non-attainment area: T4S-R16E, T5S-R16E, T6S-R16E, T1N-R13E, T1N-R15E, T6S-R13E, and T6S-R15E.

## Form 12: Map of Cochise County PM<sub>10</sub> Non-Attainment Areas



**Legend**

- PM 10 - Nonattainment Area
- Native American Lands
- AZ Counties



DISCLAIMER: This map is for general reference purposes only. A more detailed explanation of the study area can be obtained by calling the Arizona Department of Environmental Quality. Author: NLC August 17, 2009



The red-boxed area represents the non-attainment areas of Cochise County. The following townships are in a non-attainment area: Township 23 South, Range 25 East (T23S, R25E): T23S-R26E, T23S-R27E, T23S-R28E, T24S-R25E, T24S-R26E, T24S-R27E, and T24S-R28E.

### **Form 13: Application Completeness Checklist**

**Before submitting your application to ADEQ, please ensure that you have completed the following:**

- The Responsible Official has signed Line 11 on Form 1 - Standard Permit Application Form.
  
- Any Internal Combustion Engines (Generators) and/or Boilers on site have been included in the emissions calculations in Tables 3 through 10.
  
- Synthetic Minor Calculations have been completed in Tables 12 and/or 13.
  
- The Equipment List on Form 4 has been completed and identifies all equipment which will be covered by the General Permit. This includes equipment capacities, model and serial numbers, dates of manufacture, and equipment I.D. Numbers.
  
- The Responsible Official has signed Form 6 - Compliance Certification and Certification of Truth, Accuracy and Completeness.
  
- The General Permit Application Fee of \$500 has been included in your submittal.