

# **APPLICATION PACKET**

**for**

## **GENERAL AIR QUALITY CONTROL PERMIT**

**for**

## **WASTEWATER TREATMENT PLANTS**



**Arizona Department Of Environmental Quality**

**Air Quality Division**

## **INTRODUCTION**

This application is intended to assist applicants in determining if their facility meets the criteria for coverage under the General Permit for Wastewater Treatment Plants (WWTP). If it is determined that the facility meets the criteria for coverage, this application packet assists the applicant in the submittal of the information that is required to process their application for the General Permit. Facilities which meet the criteria in the general permit and are covered under the general permit will pay lower annual air quality fees than those covered under an individual air quality permit.

Applicants wishing to obtain an air quality permits shall apply to the Arizona Department of Environmental Quality (ADEQ), except for facilities which will be located in one of the following counties: Maricopa, Pima, or Pinal County. If the facility is located in Maricopa, Pima, or Pinal County, please contact the appropriate agency at the phone number below:

Maricopa County: (602) 506-6010

Pima County: (520) 243-7400

Pinal County: (520) 866-6929

## **DISCLAIMER**

This application packet does not waive the rights of the Director as provided under Arizona Administrative Code (A.A.C.) R18-2-304 to request that additional information be submitted by the applicant to assist in the processing of the application for an air quality permit. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit. If there is any difference between this application packet and Title 18, Chapter 2 of the A.A.C., the A.A.C. shall take precedence.

## **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.

## **APPLICATION INSTRUCTIONS**

### **Form A: General Permit Applicability Checklist**

Form A of this application packet has been developed to determine if your facility qualifies for coverage. Those facilities which do not qualify must obtain an individual (source specific) air quality permit.

### **Form B: General Permit Application Form**

Please complete all lines:

Note: The “Responsible Official” is the owner or partner of the company in most cases. It may also be the president or vice-president of larger companies. If there is a question as to who the responsible official is, contact ADEQ for more information at 602-771-2337.

### **Forms C, D, and E: Emission Calculations**

These forms need to be completed in order for you to determine if this General Permit is appropriate for your facility.

### **Form F: Equipment List**

ADEQ needs to be able to identify all pieces of equipment covered under the General Permit. Use Form F to provide a list of all boilers, engines, and odor control devices to be permitted.

### **Form G: Compliance Certification / Certification of Truth, Accuracy, and Completeness**

A “Certification of Compliance with all Applicable Requirements” and “Certification of Truth, Accuracy, and Completeness” must be signed by a Responsible Official. Form F can be used to satisfy this requirement.

### **Form H: Fee Summary**

Form F is a summary of fees associated with this General Permit

### **Filing Instructions**

1. An application fee of \$500.00 must be submitted by all. Please make your check or money order payable to ADEQ. The application fee must accompany each application submittal.
2. Please mail the completed application packet and the \$500.00 application fee to the following address:

Arizona Department of Environmental Quality  
Air Quality Division  
Permits Section  
1110 West Washington Street, 3415A-3  
Phoenix, Arizona 85007-2935

# FORM A: General Permit Applicability Checklist

The following questions are designed to determine if your facility meets the criteria for coverage under the general permit or is required to obtain an individual permit.

Question #1 Will this WWTP be located in Maricopa, Pima, or Pinal Counties?

Yes  No

**If the answer is Yes**, the WWTP can not be permitted by ADEQ. Please contact the air permitting authority for the county in which the facility is located.

**If the answer is No**, proceed to Question #2.

Question #2 Are there boilers located at the WWTP?

Yes  No

**If the answer is Yes**, proceed to Question #3

**If the answer is No**, proceed to Question #5

Question #3 Will the boilers burn any fuel other than natural gas, liquefied petroleum gas (Butane or Propane), digester gas, or diesel fuel?

Yes  No

**If the answer is Yes**, the facility does not qualify for coverage under the general permit and must obtain an individual permit. Please contact the Air Quality Permits Section at ADEQ for assistance.

**If the answer is No** proceed to Question #4

Question #4 Are any of the boilers larger than 10 MMBtu/hr?

Yes  No

**If the answer is Yes**, the facility does not qualify for coverage under the general permit and must obtain an individual permit. Please contact the Air Quality Permits Section at ADEQ for assistance.

**If the answer is No**, proceed to Question #5

Question #5 Are there any non-emergency generators located at the facility?

Yes  No

**If the answer is Yes**, please complete Form E and proceed to Question #6

**If the answer is No**, the facility qualifies for coverage under this general permit.

Question #6 If the answer to Question 5 was Yes, Form E will determine the maximum allowable annual hours of operation for non-emergency generators. Can the facility limit the

non-emergency generators to that number of annual operating hours?

Yes       No

**If the answer is Yes**, the facility qualifies for coverage under this general permit.

**If the answer is No**, the facility does not qualify for coverage under the general permit and must obtain an individual permit. Please contact the Air Quality Permits Section at ADEQ for assistance.

Yes       No



## Form C: Emissions Calculations for Boilers

### Table 1 : Boiler Calculations

Boiler Capacity (MMBtu/hr)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Emissions (tons per year(tpy))
A		Natural Gas	Butane/Propane	Digester Gas	Diesel/Fuel Oil		
	PM <sub>10/2.5</sub>	0.0075	0.0078	0.013	0.014	4.38	
	SO <sub>2</sub>	0.00059	0.0055	0.005	0.829	4.38	
	NO <sub>x</sub>	0.098	0.15	0.16	0.14	4.38	
	CO	0.082	0.082	0.14	0.036	4.38	
	VOC	0.0054	0.0088	0.018	0.0024	4.38	

Capacities for multiple boilers of the same fuel type can be combined.

### Table 2 : Additional Boiler Calculations (if necessary)

Boiler Capacity (MMBtu/hr)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Emissions (tpy)
A		Natural Gas	Butane/Propane	Digester Gas	Diesel/Fuel Oil		
	PM <sub>10/2.5</sub>	0.0075	0.0078	0.013	0.014	4.38	
	SO <sub>2</sub>	0.00059	0.0055	0.005	0.829	4.38	
	NO <sub>x</sub>	0.098	0.15	0.16	0.14	4.38	
	CO	0.082	0.082	0.14	0.036	4.38	
	VOC	0.0054	0.0088	0.018	0.0024	4.38	

### Table 3 : Sum Total of Boiler Emissions (Add Tables 1 and 2)

Pollutant	Emissions (tpy)
PM <sub>10/2.5</sub>	
SO <sub>2</sub>	
NO <sub>x</sub>	
CO	
VOC	

## Form D: Emissions Calculations for Emergency Generators

### Table 4 - Emergency Generators

Generator Capacity (hp)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Emissions (tpy)
A		Diesel > 600 hp	Diesel < 600 hp	Natural Gas /LPG/ Digester Gas	Gasoline		
	PM <sub>10/2.5</sub>	0.0007	0.0022	0.00007	0.00072	0.25	
	SO <sub>2</sub>	0.0068	0.0021	0.0000041	0.00059	0.25	
	NO <sub>x</sub>	0.024	0.031	0.029	0.011	0.25	
	CO	0.0055	0.0067	0.0022	0.0022	0.25	
	VOC	0.00071	0.0025	0.00083	0.0216	0.25	

Capacities for multiple generators of the same fuel type / size category can be combined. Table 4 assumes 500 hours per year of operation.

### Table 5 : Additional Emergency Generator Calculations (if necessary)

Generator Capacity (hp)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Emissions (tpy)
A		Diesel > 600 hp	Diesel < 600 hp	Natural Gas /LPG/ Digester Gas	Gasoline		
	PM <sub>10/2.5</sub>	0.0007	0.0022	0.00007	0.00072	0.25	
	SO <sub>2</sub>	0.0068	0.0021	0.0000041	0.00059	0.25	
	NO <sub>x</sub>	0.024	0.031	0.029	0.011	0.25	
	CO	0.0055	0.0067	0.0022	0.0022	0.25	
	VOC	0.00071	0.0025	0.00083	0.0216	0.25	

Capacities for multiple generators of the same fuel type / size category can be combined. Table 5 assumes 500 hours per year of operation.

### Table 6 : Sum Total of Emergency Generators Emissions (Add Tables 4 and 5)

Pollutant	Emissions (tpy)
PM <sub>10/2.5</sub>	
SO <sub>2</sub>	
NO <sub>x</sub>	
CO	
VOC	

## Form E: Annual Hour Limitations for Non-Emergency Generators

If your WWTP contains any non-emergency generators, you will need to comply with annual hourly limits in order to qualify for the General Permit for WWTP. These annual hourly limits are designed to keep the entire facility at less than 90 tons per year of each pollutant.

In order to complete Table 7, add the total of Boiler and Emergency Generator emissions from Tables 3 and 6. This table will assist you in calculating how many tons of annual emissions are available for Non-Emergency Engines

**Table 7**

Pollutant	Total limit on Emissions (tpy)	Total Emissions from Tables 3 and 6 (tpy)	Remaining Allowable Emissions for Non- Emergency Generators (tpy)
	A	B	= A - B
PM <sub>10/2.5</sub>	<b>90</b>		
SO <sub>2</sub>	<b>90</b>		
NO <sub>x</sub>	<b>90</b>		
CO	<b>90</b>		
VOC	<b>90</b>		

At this point, you have calculated the total tons per year of each pollutant that is available for the non-emergency engines. The three tables on the next page will assist you in calculating the total potential emissions from the non emergency engines. This is necessary in order to calculate an annual hourly limitation for any non-emergency engines you have at your facility.

**Table 8 – Non-Emergency Generators**

Generator Capacity (hp)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Potential Emissions (tons per year(tpy))
		Diesel > 600 hp	Diesel < 600 hp	Natural Gas /LPG/ Digester Gas	Gasoline		
<b>A</b>		<b>B</b>				<b>C</b>	<b>= A X B X C</b>
	PM <sub>10/2.5</sub>	0.0007	0.0022	0.00007	0.00072	4.38	
	SO <sub>2</sub>	0.0068	0.0021	0.0000041	0.00059	4.38	
	NO <sub>x</sub>	0.024	0.031	0.029	0.011	4.38	
	CO	0.0055	0.0067	0.0022	0.0022	4.38	
	VOC	0.00071	0.0025	0.00083	0.0216	4.38	

Capacities for multiple generators of the same fuel type / size category can be combined. Table 8 assumes continuous operation.

**Table 9 : Additional Non-Emergency Generator Calculations (if necessary)**

Generator Capacity (hp)	Pollutant	Emission Factor (Select the appropriate factors based on fuel)				Conversion Factor	Emissions (tpy)
		Diesel > 600 hp	Diesel < 600 hp	Natural Gas /LPG/ Digester Gas	Gasoline		
<b>A</b>		<b>B</b>				<b>C</b>	<b>= A X B X C</b>
	PM <sub>10/2.5</sub>	0.0007	0.0022	0.00007	0.00072	4.38	
	SO <sub>2</sub>	0.0068	0.0021	0.0000041	0.00059	4.38	
	NO <sub>x</sub>	0.024	0.031	0.029	0.011	4.38	
	CO	0.0055	0.0067	0.0022	0.0022	4.38	
	VOC	0.00071	0.0025	0.00083	0.0216	4.38	

Capacities for multiple generators of the same fuel type / size category can be combined. Table 9 assumes continuous operation.

**Table 10 : Sum of Non-Emergency Engines Emissions (Add Tables 8 and 9)**

Pollutant	Emissions (tpy) Sum of Tables 8 and 9
PM <sub>10/2.5</sub>	
SO <sub>2</sub>	
NO <sub>x</sub>	
CO	

VOC	
-----	--

With Tables 7 and 10 completed, you now have all the information you need in order to calculate the annual hourly limit for the non-emergency generators.

**Table 11 – Annual Hourly Limit for Non-Emergency Generators**

Pollutant	Remaining Allowable Emissions for Non-Emergency Generators from Table 7	Total Potential Emissions from Tables 10	Hours in a Year	Annual Hourly Limit
	A	B	C	= (A÷B) * C
PM <sub>10/2.5</sub>			<b>8760</b>	
SO <sub>2</sub>			<b>8760</b>	
NO <sub>x</sub>			<b>8760</b>	
CO			<b>8760</b>	
VOC			<b>8760</b>	

The smallest number in the Annual Hourly Limit column is the annual hourly limit for each non emergency generator and will be listed in the Authorization to Operate for each non-emergency generator. Please note that each generator is allotted this number of hours. It is not a cumulative total for all non-emergency generators.

If A is greater than B in every row, the annual hours limit will be set to 8,760 hours.

Annual Hourly Limit for Non-Emergency Generators: \_\_\_\_\_

**FORM F: Equipment List**  
**Equipment List**  
**(Fill out every column)**

Type of Equipment	Fuel Type (if applicable)	Capacity	Make/Model	Manufacture Date	Serial #	Equipment ID

# FORM G: Certifications

## Certification of Compliance with all Applicable Requirements:

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

*The responsible official is defined as a person who is in charge of principal business functions or who performs policy or decision making functions for the business. This may also include an authorized representative for such persons. For a complete definition see the Arizona Administrative Code, Title 18, Chapter 2, Section R18-2-301.*

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 the Arizona Department of Environmental Quality as public record. I also attest that I am in compliance with the applicable requirements listed in Section 1 of the Compliance Plan and will continue to comply with such requirements and any future requirements that become effective during the life of my 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.

Name (Print/Type): \_\_\_\_\_

(Signature): \_\_\_\_\_ Date: \_\_\_\_\_

## Certification of Truth, Accuracy, and Completeness

*Arizona Administrative Code R18-2-304.H.*

*R18-2-304.H. Certification of Truth, Accuracy, and Completeness. Any application form, report, or compliance certification submitted pursuant to this Chapter shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this Article shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.*

By my signature I, \_\_\_\_\_, hereby certify that based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Name (Print/Type): \_\_\_\_\_

(Signature): \_\_\_\_\_ Date: \_\_\_\_\_

## FORM H: Fee Summary

<b>GENERAL PERMIT FOR WWTP</b>			
<b>CLASS II</b>			
<b>NON - TITLE V</b>		<b>TITLE V</b>	
<u>APPLICATION FEE</u>	<u>ANNUAL FEE</u>	<u>APPLICATION FEE</u>	<u>ANNUAL FEE</u>
\$500	\$3,020	\$500	\$4,520
<p>A facility's Non Title V vs. Title V status is dependent on the size, type, and date of manufacture of the boilers and generators. Please contact the Air Permits Section for more information.</p> <p>There is a \$500 fee for facility changes that require the issuance of new Authorizations to Operate.</p> <p>There is no fee for transfers, administrative amendments, or facility change notices that do not require a permit revision.</p> <p>Annual fees are due no later than February 1st of each year.</p>			