



GENERAL PERMIT APPLICATION PACKET

FOR

HOSPITAL FACILITIES

INTRODUCTION

This application packet assists a hospital facility in determining whether an air quality permit is required for the operation of boilers rated at less than or equal to 100 Million British Thermal Units per Hour (MMBtu/hour), emergency internal combustion engines, and ethylene oxide sterilizers. If an air quality permit is required, this application packet assists the applicant in submittal of the information that is required to process the application.

To expedite the processing of an air quality permit application, the Arizona Department of Environmental Quality (ADEQ) has created a general permit for hospital facilities. Facilities that are covered under the general permit will pay lower annual air quality fees than plants covered under an individual air quality permit. If an applicant is interested in applying for coverage under the general permit, this application packet assists the applicant in determining if their facility meets the criteria for coverage under the general permit. If it is determined that the facility meets the criteria for coverage, this application packet assists the applicant in submittal of the information required to process the application.

Applicants wishing to obtain an air quality permit shall apply to ADEQ, except for facilities located in Maricopa, Pima or Pinal County. Sources in those counties must apply for a permit with the appropriate county agency.

If the applicant has any questions regarding jurisdictional issues, please contact ADEQ's Air Quality Permit Section at (602) 771-2337.

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 the relevant facts or 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, the applicant shall provide additional information 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 Department, upon determining that additional information is needed, will suspend the counting of the days. In such case, a letter will be sent informing the applicant that the counting of days has been suspended. The letter will specify what additional information is required to continue processing the application.

APPLICATION INSTRUCTIONS

I. INSTRUCTIONS

Section 1: Standard Permit Application Form

A.A.C. R18-2-304 requires applicants to submit the Standard Application Form and supply all information required by the instructions. Below are the answers to some frequently asked questions regarding the Standard Application Form:

- 1 Item #6 asks for the Hospital Site Manager or Contact Person. This should be the person that the Arizona Department of Environmental Quality (ADEQ) may contact for additional information.
- 2 Item #8, the “Equipment Purpose” should briefly describe how the equipment is used at the hospital.
- 3 Under Item #9, if the “other” box is checked, please be specific as to the type of organization.
- 4 Item #10 asks for the Permit Application Basis, which indicates what type of permit is necessary. The following steps should be utilized when filling out Item #10:
 - a If the equipment has never been permitted, the box titled “New Source” should be checked.
 - b If the equipment is already permitted, the box titled “Renewal of Existing Permit” should be checked and the current permit number must be included on the line titled “For renewal or modification, include existing permit number.”
 - c 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.
- 5 The “Responsible Official” referred to in Item #11 is generally an owner, partner, president or vice-president of a company. If there is a question as to who the responsible official is, you may contact ADEQ for more information.

Section 2: General Permit Applicability Verification

Form A of this application packet has been developed to determine whether the facility is required to obtain an air quality permit and if so, whether the facility qualifies for the general permit. For the purposes of this applicability verification, it is assumed that the only emission units at the facility are boilers, internal combustion engines, and ethylene oxide sterilizers. If the facility has any other emission unit(s), please contact ADEQ’s Air Quality Permits Section at (602) 771-2337 for assistance.

Section 3: Emission Calculations

FORMS B and C of this application packet have been created to assist the applicant in determining the amount of regulated air pollutants emitted by the boiler(s) and internal combustion engine(s) as well as the hourly limitations for the equipment. The emission factors in this application are based on the Environmental Protection Agency’s (EPA) Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition.

APPLICATION INSTRUCTIONS

Section 4: Equipment List

FORM D of this application packet is used to provide a list of all boilers, internal combustion engines, and ethylene oxide sterilizers located at the facility. The list needs to include the type of equipment, make, model, maximum rated capacity, serial number, manufacture date, and equipment identification number (if available) for each piece of equipment. The complete submittal of all requested information concerning equipment details will reduce processing time.

In some cases, the equipment may not have been purchased by the time of application submittal. In such case, the serial number may not be listed, but an equipment identification number will still need to be provided. The equipment identification number must be clearly stenciled on each piece of equipment to be permitted before such equipment is installed.

Section 5: Compliance Certification

FORM E of this application packet must be filled out and signed by the Responsible Official (this is the same person that signs the standard permit application form).

Section 6: Truth, Accuracy, and Completeness

FORM F of this application packet must be filled out and signed by the Responsible Official (this is the same person that signs the standard permit application form).

II. FEES

A \$500 application fee is required to be submitted by applicants applying for coverage under the general permit. Please make your check or money order payable to ADEQ.

III. FILING INSTRUCTIONS

Please mail the Standard Permit Application Form, Forms A through F of the Application packet and the application fee to the following address:

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

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington Street • Phoenix, AZ 85007-2935 • Phone: (602) 771-2337

STANDARD PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and Title 18, Chapter 2, Article 3, Arizona Administrative Code)

1. Permit to be issued to: (Business license name of organization 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 #: _____
5. Name of Owner's Agent: _____
Phone #: _____ FAX #: _____
6. Plant Site Manager/Contact Person and Title: _____
Phone #: _____ FAX #: _____
7. Hospital Name: _____
Hospital Location/Address: _____
City: _____ County: _____ ZIP: _____
Indian Reservation (if applicable, which one): _____
Latitude/Longitude, Elevation: _____
8. Equipment Purpose: _____

9. Type of Organization:
 Corporation Individual Owner
 Partnership Government Entity (Government Facility Code: _____)
 Other _____
10. Permit Application Basis: *(Check all that apply)*
 New Source Revision Renewal of Existing Permit
 General Permit
For renewal or modification, include existing permit number (and exp. date): _____
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: _____ 8062 _____ State Permit Class: _____ II _____
11. Signature of Responsible Official of Organization: _____
Official Title of Signer: _____
12. Typed or Printed Name of Signer: _____
Date: _____ Phone #: _____

FORM A
GENERAL PERMIT APPLICABILITY VERIFICATION FOR HOSPITAL FACILITIES

The following questions have been developed to determine (1) if the facility is required to obtain an air quality permit pursuant to A.A.C. R-18-2-302 and (2) if the facility qualifies for coverage under the General Permit. For the purpose of this applicability verification, it is assumed that the boiler(s), internal combustion engine(s) (ICE), and ethylene oxide sterilizer(s) are the only emission units at the facility. If other emission units exist, another application may need to be filled out. If there are any questions regarding this application, please contact the ADEQ's Air Quality Permits Section at (602) 771-2337.

Question 1. Applicability of Permit

A. Does this facility have any of the following equipment?

- 1 Ethylene oxide sterilizer(s)
- 2 Any individual boiler fired at a sustained rate of more than 1 MMBtu/hr for more than an eight-hour period
- 3 Any stationary ICE larger than 325 HP regardless of manufacture date
- 4 Any stationary compression ignition ICE (generally diesel) of any size made on or after April 1, 2006
- 5 Any stationary spark ignition ICE (generally gasoline, propane, or natural gas) that meets one of the following conditions
 - a Manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
 - b Manufactured on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
 - c Manufactured on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
 - d Manufactured on or after January 1, 2009, for emergency engines with a maximum engine power greater than 25 HP.

YES NO

If the answer is **YES**, the facility qualifies for the general permit. Proceed to Question 2.

If the answer is **NO**, an individual air permit is required.

FORM A
GENERAL PERMIT APPLICABILITY VERIFICATION FOR HOSPITAL FACILITIES

Question 2. Operating Hours of Internal Combustion Engines(s)

Are you willing to limit the non-emergency operating hours of each ICE to 500 hours per 12 month period or the number calculated in Form C, whichever is less? In emergency situations there would be no limits on these engines.

- YES NO

If the answer is **YES**, proceed to Question 3.

If the answer is **NO**, you do not qualify for a general permit.

Question 3. Operating Hours of Boiler(s) - To answer to this question, please fill out Form "B" and Form "C".

Are you willing to limit the operating hours of the boiler(s) to the number calculated in Form C?

- YES NO

If the answer is **YES**, the facility qualifies for the general permit. Please proceed to Form "B".

If the answer is **NO**, the facility does not qualify for the general permit.

FORM B

EMISSIONS CALCULATIONS FOR BOILERS

Fuel: Natural Gas

The following table must be completed for calculating the emissions from boilers which combust natural gas. Emissions from the boilers are calculated by taking the heat input listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Boiler Description: Type: _____ Model: _____ Serial Number: _____

Max Heat Input Rate (MM Btu/hr) (a)	Emission Factors (lb/MMBtu)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.0075	0.00059	0.098	0.082	0.0054	4.38					

Note: Please make copies of this page if there is more than one boiler using natural gas.

FORM B (cont.)

EMISSIONS CALCULATIONS FOR BOILERS

Fuel: Butane

The following table must be completed for calculating the emissions from boilers which combust butane. Emissions from the boilers are calculated by taking the heat input listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Boiler Description: Type: _____ Model: _____ Serial Number: _____

Max Heat Input Rate (MM Btu/hr) (a)	Emission Factors (lb/MMBtu)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
0.0078	0.0044	0.15	0.082	0.0088	4.38						

Note: Please make copies of this page if there is more than one boiler using butane.

FORM B (cont.)

EMISSIONS CALCULATIONS FOR BOILERS

Fuel: Propane

The following table must be completed for calculating the emissions from boilers which combust propane. Emissions from the boilers are calculated by taking the heat input listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Boiler Description: Type: _____ Model: _____ Serial Number: _____

Max Heat Input Rate (MM Btu/hr) (a)	Emission Factors (lb/MMBtu)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.0077	0.0055	0.14	0.082	0.0088	4.38					

Note: Please make copies of this page if there is more than one boiler using propane.

FORM B (cont.)

EMISSIONS CALCULATIONS FOR BOILERS

Fuel: Diesel

The following table must be completed for calculating the emissions from boilers which combust diesel. Emissions from the boilers are calculated by taking the heat input listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Boiler Description: Type: _____ Model: _____ Serial Number: _____

Max Heat Input Rate (MM Btu/hr) (a)	Emission Factors (lb/MMBtu)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.014	0.829	0.14	0.036	0.0024	4.38					

Notes: Please make copies of this page if there is more than one boiler using diesel.

FORM B (cont.)

EMISSION CALCULATIONS FOR INTERNAL COMBUSTION ENGINES

Fuel: Gasoline

The following table must be completed for calculating the emissions from internal combustion engines that use gasoline as fuel. Emissions from the internal combustion engines are calculated by taking the power output of the internal combustion engine in horsepower listed in column **(a)** and multiplying it by the emission and conversion factors listed in columns **(b-g)**.

Engine Description: Type: _____ Model: _____ Serial Number: _____

Max Horse Power (HP) (a)	Emission Factors (lb/HP-hr)					Conversion Factor	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)	(hr/year)/(lb/ton) (g)	PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.00072	0.00059	0.011	0.0070	0.022	0.25					

- Note: 1. Conversion factor is based on 500 operating hours per year.
 2. Please make copies of this page if there is more than one internal combustion engine firing gasoline.

FORM B (cont.)

EMISSION CALCULATIONS FOR INTERNAL COMBUSTION ENGINES

Fuel: Diesel Output ≤600 HP

The following table must be completed for calculating the emissions from internal combustion engines which have a power output that is less than or equal to 600 HP and use diesel as fuel. Emissions from the internal combustion engines are calculated by taking the power output of the internal combustion engine in horsepower listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Engine Description: Type: _____ Model: _____ Serial Number: _____

Max Horse Power (HP) (a)	Emission Factors (lb/HP-hr)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.0022	0.0021	0.031	0.0067	0.0025	0.25					

- Note: 1. Conversion factor is based on 500 operating hours per year.
2. Please make copies of this page if there is more than one internal combustion engine with a power output less than or equal to 600 hp firing diesel.

FORM B (cont.)

EMISSION CALCULATIONS FOR INTERNAL COMBUSTION ENGINES

Fuel: Diesel Output > 600 HP

The following table must be completed for calculating the emissions from internal combustion engines which have a power output greater than 600 HP and use diesel as fuel. Emissions from the internal combustion engines are calculated by taking the power output of the internal combustion engine in horsepower listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Engine Description: Type: _____ Model: _____ Serial Number: _____

Max Horse Power (HP) (a)	Emission Factors (lb/HP-hr)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.0007	0.006472	0.024	0.0055	0.000705	0.25					

- Note: 1. Conversion factor is based on 500 operating hours per year.
 2. Please make copies of this page if there is more than one internal combustion engine with a power output greater than 600 hp firing diesel.

FORM B (cont.)

EMISSION CALCULATIONS FOR INTERNAL COMBUSTION ENGINES

Fuel: Natural Gas / LPG

The following table must be completed for calculating the emissions from internal combustion engines which use natural gas/LPG as fuel. Emissions from the internal combustion engines are calculated by taking the power output of the internal combustion engine in horsepower listed in column (a) and multiplying it by the emission and conversion factors listed in columns (b-g).

Engine Description: Type: _____ Model: _____ Serial Number: _____

Max Horse Power (HP) (a)	Emission Factors (lb/HP-hr)					Conversion Factor (hr/year)/(lb/ton) (g)	Emissions (tons per year)				
	PM ₁₀ (b)	SO ₂ (c)	NO _x (d)	CO (e)	VOC (f)		PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NO _x (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.0000054	0.0000041	0.029	0.0022	0.00083	0.25					

- Note: 1. Conversion factor is based on 500 operating hours per year.
 2. Please make copies of this page if there is more than one internal combustion engine firing natural gas/LPG.

FORM C

Total Emissions/Hourly Limitations

The following table must be completed for determining the total amount of regulated air pollutants.

Table C1 - Total Emissions

	TOTAL EMISSIONS (tons per year)				
	PM₁₀	SO₂	NO_x	CO	VOC
Total from Natural Gas Boilers					
Total from Butane Boilers					
Total from Propane Boilers					
Total from Diesel Boilers					
Total from Gasoline Engines					
Total from Diesel Engines (Less than or equal to 600 HP)					
Total from Diesel Engines (Greater than 600 HP)					
Total from LPG/Natural Gas Engines					
Total					

FORM C

Total Emissions/Hourly Limitations

The following table must be completed for determining any applicable operating hours limit.

Table C2 – Limits to Operating Hours

Pollutant	Column A: Total Facility Emissions from Table C1	Column B: Emission Limit	Column C: Scaling Factor for Annual operation hours	Column D: Annual Operating Hours for Boilers	Column E: Annual Operating Hours for Engines
	Tons per year	Tons per year	---	Hours Per 12-month period	Hours Per 12-month period
	Transfer Totals from Table C1	---	Take Column B and divide by Column A.	Multiply 8,760 by Column C. If result is greater than 8,760, enter 8,760.	Multiply 500 by Column C. If result is greater than 500, enter 500.
PM ₁₀		90			
SO ₂		90			
NO _x		90			
CO		90			
VOCs		90			

**The lowest number in Column D is the limitation on operating hours for boilers.
The lowest number in Column E is the limitation on operating hours for engines.**

FORM E

CERTIFICATION OF COMPLIANCE

Compliance Certification

1. Applicant hereby affirms that it is in compliance with all applicable requirements of the General Permit and will continue to comply with such requirements.
2. For any additional applicable requirements that become effective during the term of the General Permit, Applicant affirms that it will meet such requirements on a timely basis.
3. The Applicant hereby affirms that it will submit the compliance certification each year on September 30. The compliance certification shall describe the compliance status of the source with respect to each general permit condition and the methods used for determining the compliance status.
4. Applicant hereby affirms that the facility will be operated according to the manufacturer's specifications and recommendations.
5. The Applicant hereby affirms that it shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
6. This certification must be signed by a Responsible Official. Applications without a signed certification will be deemed incomplete.

Certification of Compliance

I certify that I have knowledge of the facts herein set forth and in this application, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information shall be treated by the Arizona Department of Environmental Quality as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Arizona Administrative Code, Title 18, Chapter 2 and the Boiler General Permit.

Company Name (Print/Type): _____

Name (Print/Type): _____

Signature: Date: _____

FORM F

CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

1. This certification must be signed by the Responsible Official. Applications without a signed certification will be deemed incomplete.
2. I certify that I have knowledge of the facts herein set forth and in this application 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.

Typed or Printed Company Name: _____

Official Title of Signer: _____

Typed or Printed Name of Signer: _____

Signature of Responsible Official: _____ Date: _____

FEE RULE SUMMARY

CLASS II GENERAL PERMIT FEES AS OF 2009

TITLE V

NON-TITLE V

**APPLICATION
FEE \$500**

ANNUAL ADMINISTRATIVE FEE

All Sources \$4,520

**APPLICATION
FEE \$500**

ANNUAL INSPECTION FEE

All Sources \$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 1st of each year.

Any facility with an ethylene oxide sterilizer is classified as Title V. For facilities without an ethylene oxide sterilizer, Title V status is dependent on boiler/engine capacities and manufacture date. Contact ADEQ's Air Quality Permit Section at (602) 771-2337 for further information