

APPLICATION COMPLETENESS CHECKLIST

GENERAL PERMIT – HOSPITAL FACILITIES

NOTE: If this facility will be located in Maricopa, Pima, or Pinal County you are not eligible for this General Permit. You must apply for a permit with the appropriate county agency.

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 (page 6) has been completed and signed by the Responsible Official (see page 3 for definition of "Responsible Official")
Verified that the business name identified in Item #1 of the Standard Permit Application Form is registered with the Arizona Corporation Commission (page 6)
The General Permit Application Fee of \$500 has been included in your submittal
The Responsible Official has signed the Certification of Compliance and the Certification of Truth, Accuracy, and Completeness (Forms E and F $-$ pages 16 and 17)
Emission calculations have been completed for all applicable equipment using the maximum rated capacity for each piece of equipment. If you have used the Emission Calculation Spreadsheet for emission calculations, the completed spreadsheet must be attached to the application. The Emission Calculation Spreadsheet is available at: http://www.azdeq.gov/environ/air/permits/download/gnhoscalc.xls
The General Permit Applicability Verification for Hospital Facilities is completed (Form A – pages 7 and 8)
Emission calculations been completed for all applicable equipment using maximum rated capacity for each piece of equipment (Forms B and C – pages 10 to 14)
The Equipment List has been completed and identifies all equipment which will be covered by this General Permit. This includes type of equipment, maximum rated capacity, make, model, serial number, date or year of manufacture, and equipment identification number (Form D - page 15)



GENERAL PERMIT APPLICATION PACKET FOR

HOSPITAL FACILITIES

March 23, 2015

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.
- 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 emergency internal combustion engine(s) (ICE) 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. An Excel spreadsheet was developed to assist applicants in completing their emission calculations. The emissions calculation spreadsheet is available at the following address:

APPLICATION INSTRUCTIONS

http://www.azdeq.gov/environ/air/permits/download/gnhoscalc.xls

If the above calculation spreadsheet is submitted, the applicant is not required to complete Tables A through F of Forms B and C of this application. Otherwise, the applicant must complete Tables A through F of Forms B and C. These tables provide worksheets to assist the applicant in calculating emission rates.

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).

Section 7: 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.

Section 8: 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)

Mailine	g Address:					
waning					ZIP:	
Previou	-				ZII	
T (dillo (•				
Name o	of Owner's Agent:			· · · · · · · · · · · · · · · · · · ·		
Plant S						
Hospita						
	al Location/Address:					
-					ZIP:	
	Indian Reservation (i	f applicable, which o	ne):			
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Type o	f Organization: □ Corporation □ Partnership	□ Individual O □ Government	wner Entity (Government	Facility Code:		
Type o	f Organization: Corporation Partnership Other	□ Individual O □ Government	wner Entity (Government	Facility Code:		
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Type o	f Organization: Corporation Partnership Other Application Basis: (C New Source General Permit For renewal or modif Date of Commencem Is any of the equipme Standard Industrial C are of Responsible Official Title of Sign	☐ Individual O☐ ☐ Government Theck all that apply)☐ Revision Tication, include exist ent of Construction of ent to be leased to and classification Code:	wner Entity (Government Renew ing permit number (a or Modification: other individual or er 8062	Facility Code:	Permit Yes State Permit Class:	

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), emergency 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 I.	Capac	city of Boil	er(s)						
	A.	A. Does this facility only have a combination of boilers with a cumulative maximum linput rate of less than 10 Million Btu per hour?							
		YES	□NO	If the answer is YES, a permit is not required.					
				If the answer is NO, proceed to Question I.B					
	В.			nput rate of any one boiler(s) more than or equal to 10 million Btu onstructed, modified or reconstructed after June 9, 1989?					
		YES	□NO	If the answer is YES, proceed to Question I.C.					
				If the answer is NO, proceed to Question II.					
	C.	Is the sus	tained heat i	nput rate of any of one boiler(s) more than 100 MMBtu/hr?					
		YES	□NO	If the answer is YES, you do not qualify for a general permit. A standard permit application should be filed.					
				If the answer is NO, proceed to Question II.					
	D.		-	any of one boiler with a heat input rate greater than or equal to 10 or diesel fired?					
		YES	□NO	If the answer is YES, you do not qualify for a general permit. A standard permit application should be filed.					
				If the answer is NO, proceed to Question II.					
Question II.	Capac	city of Inte	rnal Combu	astion Engine(s) (ICE)					
	engine	his facility operate any non-emergency IC engines? This General Permit only covers IC s for emergency purposes. Emergency engines are used for backup purposes and do not be for greater than 500 hours per year.							
		YES	□ NO	N/A (No ICE)					
				If the answer is YES, you do not qualify for this general permit.					

FORM A GENERAL PERMIT APPLICABILITY VERIFICATION FOR HOSPITAL FACILITIES

If the answer is NO, proceed to Question III.

If the answer is N/A, proceed to Question III.

Question III. Potential to Emit

Before answering this question, please fill out Table "F" and use the results in column "C" to complete the table below.

	Column A	Column B
Pollutant	Total Emissions	Permitting
Fonutant	from	Thresholds
	Table C (tpy)	(tpy)
PM_{10}		15
SO_2		40
NO_x		40
VOC		40
CO		100

If Column A is less than Column B, for <u>every</u> pollutant, and there is no one boiler with a heat capacity above 10MMBtu/hr which was constructed, modified or reconstructed after June 9, 1989 (you answered "no" to Question I.B), **no air quality control permit is required**.

If Column A is greater than Column B, for \underline{any} pollutant, the facility needs an air quality permit. Please complete the application packet.

EMISSIONS CALCULATIONS FOR BOILER(s)

Fuel: Natural Gas

The following table must be completed for calculating the emissions from boiler(s) 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-f and g).

Boiler Description:	Type:	Model:	Serial Number:
-			

Table A

Max Heat Input Rate	Emission Factors (lb/MMBtu)					Conversion Factor	Emissions (tons per year)				
(MM Btu/hr) (a)	PM ₁₀ (b)	SO ₂ (c)	NOx (d)	CO (e)	VOC (f)	(hr/year)/(lb/ton) (g)	PM ₁₀ (a*b*g)	SO ₂ (a*c*g)	NOx (a*d*g)	CO (a*e*g)	VOC (a*f*g)
	0.00745	0.00058	0.098	0.0824	0.00539	4.38					

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

EMISSIONS CALCULATIONS FOR BOILER(s)

Fuel: Butane

The following table must be completed for calculating the emissions from boiler(s) 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-f and g).	

Boiler Description:	Type:	Model:	Serial Number:
Donce Description.	Турс	Model.	Scriai Number.

Table B

Max Heat Input Rate	Emission Factors (lb/MMBtu)					Conversion Factor	Emissions (tons per year)				
(MM Btu/hr) (a)	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)
	0.00616		0.216	0.037	0.004106	4.38					

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

EMISSIONS CALCULATIONS FOR BOILER(s)

Fuel: Propane

The following table must be completed for calculating the emissions from boiler(s) 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-f and g).	

Boiler Description:	Type:	Model:	Serial Number:
_	• • • • • • • • • • • • • • • • • • • •	·	

Table C

Max Heat Input Rate	Emission Factors (lb/MMBtu)					Conversion Factor	Emissions (tons per year)				
(MM Btu/hr) (a)	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)
	0.00765		0.142	0.082	0.0109	4.38					

EMISSIONS CALCULATIONS FOR BOILER(s)

Fuel: Diesel

The following table must be completed for calculating the emissions from boiler(s) 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-f and g).	

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

Table D

Max Heat Input Rate	Emission Factors (lb/MMBtu)			Conversion Factor			Emissions (tons per year)				
(MM Btu/hr) (a)	PM ₁₀ (b)	SO ₂ (c)	NOx (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)
	0.0143	0.00152	0.0143	0.0357	0.00243	4.38					

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

EMISSION CALCULATIONS FOR EMERGENCY INTERNAL COMBUSTION ENGINE(s)

Table E: Emissions from Emergency ICEs

Total HP of all diesel ICEs with individual HP of less than 600 HP:	(a) HP
Total HP of all diesel ICEs with individual HP of greater than 600 HP:	(b) HP
Total HP of all natural gas / LPG fired ICEs:	(c) HP

	Emission Factor			Emissions			
Pollutant	Diesel Engines (Lesser than 600 HP)	Diesel Engines (Greater than or equal to 600 HP)	Natural gas/ LPG-fired Engines	Diesel Engines (Smaller than 600 HP)	Diesel Engines (larger than 600 HP)	Natural gas/ LPG-fired Engines	Total Emissions from all ICEs
		(Pounds per hp-hr)		Pounds per hour		Tons per Year
	d	e	f	$A = a \times d$	$B = b \times e$	$C = c \times f$	E1 = (A + B + C) x 0.25
PM	0.0022	0.0007	0.000269				
PM_{10}	0.0022	0.0007	0.000269				
СО	0.00668	0.0055	0.00026				
NO _x	0.031	0.024	0.0286				
SO_2	0.0000121	0.0000121	0.0000041				
VOCs	0.00247	0.0007050	0.000826				

FORM C

Total Emissions/Hourly Limitations

This table is to be used for calculating hourly emission limitations for operation of the boilers if the emissions exceed 90 tons per year for any one pollutant.

Table F: Synthetic Minor Limitation

Pollutants	Total Boiler Emissions (pollutant totals from Tables A, B, C, and D)	Total Emergency Engine Emissions (Column E1 from Table E)	Total Emissions (for use in calculating permit applicability determination in Question III)	Emission limit	Hours of operation (Max.)
	Tons per Year		Tons per Year	Tons per year	Hrs
	a	b	c = a + b	e = 90 - b	A=(e/a)*8760 (not to exceed 8760 hrs)
PM_{10}					
CO					
NOx					
SO ₂					
VOCs					

The lowest number in column A is the annual hourly operating limit.

Annual Operating hours: _____ hours

FORM D

Equipment List

Please list all the boilers, internal combustion engines, and ethylene oxide sterilizers which are at the facility. Please make copies of this page to complete if more spaces are necessary.

Type of Equipment	Maximum Rated Capacity	Make	Model	Serial Number	Date of Manufacture	Equipment I.D. Number

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:

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.

FEE RULE SUMMARY

CLASS II GENERAL PERMIT FEES AS OF 2015

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