

**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
GENERAL PERMIT FOR HOSPITALS**

I. INTRODUCTION

This Hospital General Permit is for the operation for a facility class (hospitals) that contains two or more facilities that are similar in nature, have substantially similar emissions, and would be subject to the same or substantially similar requirements. Facilities under this General Permit operate boilers, emergency engines and may have ethylene oxide sterilizers. The General Permit will last for 5 years from the date of its issuance. Equipment covered under this general permit will be required to have an “Authorization To Operate” (ATO) for each significant piece of equipment. The ATO will identify the piece of equipment by having the name of manufacturer, date of manufacture, maximum capacity, and serial number or equipment identification number along with the annual operating hour limitation, if any, depending on the equipment.

II. ATTAINMENT CLASSIFICATION

There are two facilities currently covered under the general permit for hospitals. One facility is located in Coconino County, which is designated attainment or unclassified for all criteria pollutants. The other facility is located in Yuma County, which is designated non-attainment for PM₁₀ and ozone, and attainment for all other criteria pollutants.

III. APPLICABLE REGULATIONS

Table 1 identifies applicable regulations and verification as to why that standard applies.

Table 1: Applicable Regulations

Unit ID	Control Device	Applicable Regulations	Discussion
Boilers	None	A.A.C. R18-2-724; 40 CFR 60 Subpart Dc;	A.A.C. R18-2-724 is applicable to fossil-fuel fired industrial and commercial equipment that has a maximum firing capacity less than 250 MMBtu. Boilers that are manufactured or modified after June 9, 1989 and have a firing capacity between 10 MMBtu and 100 MMBtu are subject to 40 CFR 60 Subpart Dc. The boilers covered under this general permit are not subject to 40 CFR 63 Subpart JJJJJ because the boilers meet the definition of a natural gas-fired boiler. Natural gas boilers are not subject to the boiler MACT requirements.

Unit ID	Control Device	Applicable Regulations	Discussion
Internal Combustion Engines	None	40 CFR 60 Subpart III; 40 CFR 60 Subpart JJJJ; A.A.C. R18-2-719;	<p>Compression ignition internal combustion engines manufactured after April 1, 2006 are subject to the requirements of 40 CFR 60 Subpart III.</p> <p>Spark ignition internal combustion engines manufactured after July 1, 2008 are subject to the requirements of 40 CFR 60 Subpart JJJJ.</p> <p>Existing internal combustion engines are subject to the requirements of A.A.C. R18-2-719; the standards of performance for stationary rotating machinery.</p> <p>Emergency internal combustion engines located at medical centers, such as hospitals, are exempt from the requirements of 40 CFR 63 Subpart ZZZZ.</p>
Ethylene Oxide Sterilizers	None	40 CFR 63 Subpart WWWW	<p>Ethylene oxide sterilizers at the facility are subject to the national emission standards for hospital ethylene oxide sterilizers in 40 CFR 63 Subpart WWWW.</p> <p>Ethylene oxide sterilizers located at hospitals are exempt from the requirements of 40 CFR 63 Subpart O.</p>
Fugitive dust sources	Water Trucks Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2-702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.

Unit ID	Control Device	Applicable Regulations	Discussion
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	This standard is applicable to any spray painting operation.
Demolition/renovation operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

IV. PREVIOUS PERMIT AND CONDITIONS

A. Previous Permit Conditions

Table 3 compares the sections in the previous Hospital General Permit with the conditions in this renewal permit:

Table 3: Previous Permit Conditions

Section No.	Determination			Comments
	Revised	Added	Deleted	
Att. "A"	X			General Provisions: Revised to represent the most recent template language
Att. "B" Condition I.J		X		Facility-Wide Requirements: Condition was added to include the fuel requirements for the boilers. The condition prohibits the Permittee from burning diesel for more than 48 hours, unless there is a period of natural gas curtailment or gas supply emergency. The condition ensures the boilers at the facility are not subject to 40 CFR 63 Subpart JJJJJ (6J).
Att. "B" Condition II.C.1.c	X			Boilers Subject to State Regulations Revised to reflect the language in A.A.C. R18-2-724.J.
Att. "B" Condition III.C.3	X			New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS Subpart Dc): The testing requirements were removed since the facility is only allowed to burn diesel for a period of 48 hours or during periods of natural gas curtailment or gas supply emergencies. The operational time using diesel will not exceed 180 days.

Section No.	Determination			Comments
	Revised	Added	Deleted	
Att. "B" Condition IV.B.1.a(1)	X			Emergency Internal Combustion Engine(s): Applicability revised to include the language in 40 CFR 60.4200(a).
Att. "B" Condition IV.B.2.a	X			Emergency Internal Combustion Engine(s): Revised to streamline the requirements of 40 CFR 60.4211(a) and 40 CFR 60.4206.
Att. "B" Condition IV.B.2.f(2)(iii)-(iv)			X	Emergency Internal Combustion Engine(s): Requirements for 40 CFR 60.4211(f)(2)(ii)-(iii) removed.
Att. "B" Condition IV.B.3.a(3)		X		Emergency Internal Combustion Engine(s): Note 3 to Table 4 of 40 CFR 60 Subpart III added to the permit.
Att. "B" Condition IV.B.3.b(2)(a)	X			Emergency Internal Combustion Engine(s): Revised to streamline condition 40 CFR 60.4205(b) and 4202(a).
Att. "B" Condition IV.B.3.b(2)(a)	X			Emergency Internal Combustion Engine(s): Revised to include Table 2 from 40 CFR 60 Subpart III.
Att. "B" Condition IV.B.3.f(1)-(3)		X		Emergency Internal Combustion Engine(s): Added option for alternate compliance demonstration requirements.
Att. "B" Condition IV.B.5.b(1)			X	Emergency Internal Combustion Engine(s): The requirements in Condition IV.B.5.b(1) are not applicable to emergency engines under 40 CFR 60.4214(b).
Att. "B" Condition IV.B.5.e, e(1)(e)-(f)			X	Emergency Internal Combustion Engine(s): Removed reporting requirements associated with 40 CFR 60.4211(f)(2)(ii)-(iii).
Att. "B" Condition IV.B.5.e(2)	X			Emergency Internal Combustion Engine(s): Removed requirement to submit the first annual report for calendar year 2015.
Att. "B" Condition IV.C.3.c(2)(b)-(c)			X	Emergency Internal Combustion Engine(s):

Section No.	Determination			Comments
	Revised	Added	Deleted	
				Removed requirements associated with 40 CFR 60.4243(d)(2)(ii)-(iii).
Att. "B" Condition IV.B.5.b(1)			X	Emergency Internal Combustion Engine(s): The requirements in Condition IV.B.5.b(1) are not applicable to emergency engines under 40 CFR 60.4214(b).
Att. "B" Condition V.B.2.a	X			Emergency Internal Combustion Engine(s): Revised the condition to remove the due date of December 29, 2008 for the initial notification under Subpart WWWW.
Att. "B" Section VI	X			Fugitive Dust Requirements: Updated to reflect current template language.
Att. "B" Section VII	X			Other Periodic Activities: Updated to reflect current template language.

V. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

A. Facility Wide

1. Along with the semiannual compliance certification, the Permittee is required to submit reports of all recordkeeping, monitoring and maintenance required by the permit.
2. The Permittee is required to maintain, on-site, records of the manufacturer's specifications or an Operation and Maintenance Plan for all equipment listed in the permit.
3. If a boiler at the facility is limited to less than 8,760 hours of operation per year, the Permittee is required to maintain a record of the hours of operation for the boiler.

B. Boilers Subject to State Regulations

1. If the opacity of the boiler exceeds 15% opacity, the Permittee is required to report the exceedance to the Department.
2. The Permittee is required to maintain records of the fuel supplier certifications to demonstrate compliance with the sulfur content limit within the permit.

C. New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS Subpart DC)

1. The Permittee is required to records the amount of fuel combusted in the boiler.
2. The Permittee is required to maintain records of the occurrence and duration of any boiler startups, shutdowns and malfunctions.
3. The Permittee is required to maintain records of the following:
 - a. Dates and time intervals of all opacity observation periods;
 - b. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - c. Copies of all visible emission observer opacity field data sheets.
4. The Permittee is required to provide notifications to ADEQ for all boilers subject to construction, reconstruction or modification.

D. Emergency Engines

1. If the engine(s) is subject to 40 CFR 60 Subpart III:
 - a. The Permittee is required to maintain copies of the fuel supplier certifications.
 - b. The Permittee is required to keep records of all notifications submitted to comply with 40 CFR 60 Subpart IIII and all documentation supporting any notification.
 - c. The Permittee is required to keep records of the maintenance conducted on the engine.
 - d. If the stationary CI internal combustion engine is certified, the Permittee is required to keep documentation from the manufacturer that the engine is certified to meet the emission standards.
 - e. If the stationary CI internal combustion is not a certified engine, the Permittee is required to keep documentation that the engine meets the emission standards.
 - f. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee is required to keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached.
 - g. If the Permittee operates an emergency stationary CI ICE with a maximum engine power greater than 100 HP, the Permittee is required to submit an annual report.

h. The Permittee is required to maintain monthly records of engine operation.

2. If the engine(s) are subject to state regulations:

a. A certified EPA Reference Method 9 observer is required to conduct a monthly survey of visible emissions emanating from the stack of the generator(s).

b. The Permittee is required to keep records of fuel supplier certifications

E. Ethylene Oxide Sterilizers

1. The Permittee is required to submit an Initial Notification of Compliance Status upon startup

2. For each sterilization unit not equipped with an air pollution control device, the Permittee is required to record the date and time of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from a hospital central services staff, a hospital administrator, or a physician that it was medically necessary.

3. The Permittee is required to maintain records of the Initial Notification of Compliance Status.

4. The records required for the sterilization unit.

F. Fugitive Dust

1. The Permittee is required to keep record of the dates and types of dust control measures employed.

2. The Permittee is required to show compliance with the opacity standards by having a Method 9 certified observer perform a monthly survey of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.

3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.

4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

G. Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.

2. The Permittee is required to record the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.
3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

VI. LIST OF ABBREVIATIONS

A.A.C.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
Btu/ft ³	British Thermal Units per Cubic Foot
Btu/hr.....	British Thermal Units per Hour
CFR.....	Code of Federal Regulations
CO.....	Carbon Monoxide
FERC.....	Federal Energy Regulatory Commissions
HAP.....	Hazardous Air Pollutant
hp.....	Horsepower
lb/hr.....	Pound per Hour
NO _x	Nitrogen Oxides
PM.....	Particulate Matter
PM ₁₀	Particulate Matter Nominally less than 10 Micrometers
SO _x	Sulfur Oxides
VOC.....	Volatile Organic Compound