

DRAFT

AIR EMISSION PERMIT NO. 05300061-002

Major Amendment

IS ISSUED TO

Allina Health System

ABBOTT NORTHWESTERN HOSPITAL
800 28th Street East
Minneapolis, Hennepin County, Minnesota, 55407

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 05300061-002 and authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the State Implementation Plan SIP under 40 CFR § 52.1220 and as such are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: State; Limits to Avoid Part 70/Limits to Avoid NSR; True Minor for NSR

Operating Permit Issue Date: December 15, 2005

Major Amendment Issue Date: <issue date>

Expiration Date: Nonexpiring – Title I Conditions do not expire.

Don A. Smith, Manager
Air Quality Permits Section
Industrial Division

for John Linc Stine
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	December 7, 1995 and April 24, 2002	001
Major Amendment	April 3, 2012 and XXX	002

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Abbott Northwestern Hospital (Abbott) is owned by Allina Health System and includes the hospital and associated laboratories and diagnostic centers.

Emissions units at Abbott include boilers and emergency generators. Pollutants of concern include products of combustion such as nitrogen oxides, carbon monoxide, particulate matter, particulate matter less than 10 microns, particulate matter less than 2.5 microns. The permit contains operating limits on natural gas and fuel oil usage for the Group 1 (GP001) boilers and on Number 2 fuel oil usage for the GP003 boilers. The emergency generators (GP002 and EU027) are limited to 300 hours per year.

AMENDMENT DESCRIPTION:

Permit Action 002 authorizes a fuel change for the Group 1 boilers from Number 6 fuel oil to Number 2 fuel oil. Additionally, requirements for the natural gas boilers (GP004) and the emergency generator (EU027) associated with the lab in the 10th avenue Building are being added to the permit through this permit action. GP002 now includes emergency generators, except for EU027. GP005 is the ethylene oxide sterilizers and related control equipment (CE001).

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1 12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

What to do	Why to do it
Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in Appendix I: Insignificant Activities and Applicable Requirements. Modeling parameters in Appendix II:Emission Rates and Exhaust Parameters Used for Modeling are included for reference only.	Minn. R. 7007.0800, subp. 2
The parameters used in NO ₂ , PM ₁₀ , PM _{2.5} , CO, Lead, and SO ₂ modeling for permit number 05300061-002 are listed in Appendix II of this permit. The parameters describe the operation of the facility at maximum permitted capacity. The purpose of listing the parameters in the appendix is to provide a benchmark for future changes.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subps. 1, 2 & 4
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For nonexpiring permits, these records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: GP 001 Main Campus Natural Gas/No. 2 Fuel Oil Boilers (EU001-EU004)**Associated Items:** EU 001 Package Watertube Boiler 1

EU 002 Package Watertube Boiler 2

EU 003 Package Watertube Boiler 3

EU 004 Package Watertube Boiler 4

What to do	Why to do it
Emission limits apply to each emission unit individually	hdr
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60% opacity.	Minn. R. 7011.0510, subp. 2
Permitted Fuels: Natural gas and No. 2 residual fuel oil with a sulfur content not exceeding 0.0015% by weight.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7005.0100, subp. 35a
Fuel Usage: less than or equal to 525 million cubic feet/year natural gas using 12-month Rolling Sum.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Fuel Usage: less than or equal to 755,000 gallons/year using 12-month Rolling Sum of No. 2 fuel oil using 12-month Rolling Sum.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Monthly Natural Gas Recordkeeping: By the third Tuesday of each month, the Permittee shall calculate and record the following: 1) The total natural gas usage for the previous calendar month. 2) The 12-month rolling sum natural gas usage for the previous 12-month period by summing the monthly natural gas usage data for the previous 12 months.	Minn. R. 7007.0800, subps. 4 and 5
Monthly No. 2 Fuel Oil Recordkeeping: By the third Tuesday of each month, the Permittee shall calculate and record for each boiler in GP001 the following: 1) The total No. 2 fuel oil usage for the previous calendar month. 2) The 12-month rolling sum No. 2 fuel oil usage for the previous 12-month period by summing the monthly No. 2 usage data for the previous 12 months.	Minn. R. 7007.0800, subps. 4 and 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.0015% by weight.	Minn. R. 7007.0800, subps. 4 and 5
Requirements under 40 CFR pt. 63, Subpart JJJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources Enforcement not delegated to MPCA.	hdr
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with the requirement to conduct an energy assessment no later than March 21, 2014.	40 CFR Section 63.11196(a)(3)
The Permittee shall comply with the requirement to conduct a tune-up according to 40 CFR Section 63.11223(b); no later than March 21, 2012, or a later date as determined by EPA rulemaking to amend Subpart JJJJJJ.	40 CFR Section 63.11196(a)(1)
At all times the Permittee must operate and maintain affected boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenances records, and inspection of the source.	40 CFR Section 63.11205(a)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

The Permittee shall demonstrate initial compliance with each applicable work practice standard, management practice, or emission reduction measure no later than March 21, 2014 and according to the applicable provisions in 40 CFR Section 63.7(a)(2).	40 CFR Section 63.11210(c)
<p>The Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. The energy assessment must include</p> <p>(1) A visual inspection of the boiler system,</p> <p>(2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,</p> <p>(continued below)</p>	40 CFR 63.11201(b); 40 CFR Section 63, subp. JJJJJJ, Table 2
<p>(continued)</p> <p>(3) Inventory of major systems consuming energy from affected boiler(s),</p> <p>(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,</p> <p>(5) A list of major energy conservation measures,</p> <p>(6) A list of the energy savings potential of the energy conservation measures identified,</p> <p>(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.</p>	40 CFR 63.11201(b); 40 CFR Section 63, subp. JJJJJJ, Table 2
The Permittee must conduct a tune-up for each boiler biennially and keep records as required in 40 CFR Section 63.11225(c) to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.	40 CFR Section 63.11201(b); 40 CFR Section 63.11223(a); 40 CFR Section 63, subp. JJJJJJ, Table 2
<p>The Permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in (1) through (7) as follows:</p> <p>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).</p> <p>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.</p> <p>(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.</p> <p>(continued below)</p>	40 CFR Section 63.11223(b)
<p>(continued)</p> <p>(5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).</p> <p>(6) Maintain onsite and submit, if requested by the Administrator, biennial report containing the information in (6)(i) through (iii) below:</p> <p>(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.</p> <p>(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.</p> <p>(iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.</p> <p>(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.</p>	40 CFR Section 63.11223(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

The Permittee must comply with the General Provisions as applicable in Table 8 of 40 CFR pt. 63, subp. JJJJJJ.	40 CFR Section 63.11235; 40 CFR pt. 63 subp. JJJJJJ, Table 8
RECORDKEEPING	hdr
<p>The Permittee must maintain the following records:</p> <p>(1) A copy of each notification and report that was submitted to comply with subpart JJJJJJ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR Section 63.10(b)(2)(xiv);</p> <p>(2) Records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR Section 63.11214 as specified as follows:</p> <p>(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.</p> <p>(ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.</p> <p>(continued below) (continued below)</p>	40 CFR Section 63.11225(c)
<p>(continued)</p> <p>(3) Records of the occurrence and duration of each malfunction of each boiler or of the associated air pollution control and monitoring equipment.</p> <p>(4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.</p> <p>(continued below)</p>	40 CFR Section 63.11225(c)
<p>(continued)</p> <p>(5) The Permittee must maintain records of all inspection and monitoring data as required by 40 CFR Sections 63.11221 and 63.11222, and the information identified below for each required inspection or monitoring:</p> <p>(i) The date, place, and time of the monitoring event;</p> <p>(ii) Person conducting the monitoring.</p> <p>(iii) Technique or method used;</p> <p>(iv) Operating conditions during the activity;</p> <p>(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation; (vi) Maintenance or corrective action taken (if applicable).</p>	40 CFR Section 63.11225(c)
Records must be in a form suitable and readily available for expeditious review, according to 40 CFR Section 63.10(b)(1). The Permittee must keep each record for 5 years following the date of each recorded action. The Permittee must keep each record onsite for at least 2 years after the date of each recorded action according to 40 CFR Section 63.10(b)(1). The Permittee may keep the records off site for the remaining 3 years.	40 CFR Section 63.11225(d)
REPORTING AND NOTIFICATION REQUIREMENTS	hdr
<p>The Permittee must prepare by March 1 of each year, and submit to the Administrator upon request, an annual compliance certification report. The Permittee must submit the annual compliance report if the Permittee had any instance described by item 3 below. The annual compliance certification report for the previous calendar year must contain the information the following.</p> <p>(1) Company name and address</p> <p>(2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of Subpart JJJJJJ.</p> <p>(3) Include a description of deviations from the applicable requirements during the reporting period, the time periods during which the deviations occurred, and the corrective actions taken.</p>	40 CFR Sections 63.11225(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

<p>The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR Section 63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR Section 63.11196. In addition to the information required in 40 CFR Section 63.9(h), the notification must include the following certifications of compliance, as applicable and signed by a responsible official:</p> <p>(1) <input type="checkbox"/> This facility complies with the requirements in 40 CFR Section 63.11214 to conduct an initial tune-up of the boiler.<input type="checkbox"/></p> <p>(2) <input type="checkbox"/> This facility has had an energy assessment performed according to 40 CFR Section 63.11214(c).<input type="checkbox"/></p>	40 CFR Section 63.11225(a)(4)
<p>The Permittee must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed and submit, upon request, the energy assessment report.</p>	40 CFR Section 63.11214(c)
<p>The Permittee must conduct a performance tune-up according to 40 CFR pt. 63.11223(b) and submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted a tune-up of the boiler.</p>	40 CFR Section 63.11214(b)
<p>The Permittee must submit all of the notifications in 40 CFR Sections 63.7(b); 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) that apply by the dates specified in those sections.</p>	40 CFR Section 63.11225(a)(1)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: GP 002 Emergency Generators 1-10

Associated Items: EU 005 Reciprocating Engine Generator 1
 EU 006 Reciprocating Engine Generator 2
 EU 007 Reciprocating Engine Generator 3
 EU 008 Reciprocating Engine Generator 4
 EU 009 Reciprocating Engine Generator 5
 EU 010 Reciprocating Engine Generator 6
 EU 015 Reciprocating Engine Generator 7
 EU 016 Reciprocating Engine Generator 8
 EU 017 Reciprocating Engine Generator 9
 EU 018 Reciprocating Engine Generator 10

What to do	Why to do it
These requirements apply to each GP002 emergency generator individually.	hdr
Opacity: less than or equal to 20 percent opacity once operating temperature have been obtained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input . The potential to emit from each GP002 unit is less than 0.002 lb/MMBtu due to equipment design and allowable fuels.	Minn. R. 7011.2300, subp. 2
Permitted Fuel: No. 2 fuel oil with a sulfur content not exceeding 0.0015% by weight.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Operating Hours: less than or equal to 300 hours/year using 12-month Rolling Sum for each generator.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
The Permittee shall keep records of fuel type and hourly usage on a monthly basis.	Minn. R. 7007.0800, subps. 4 and 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.0015% by weight.	Minn. R. 7007.0800, subps. 4 and 5
During every monthly test of each emergency generator, record the following information: 1) the date, 2) the time the test was started, and 3) the time the test was completed.	Minn. R. 7007.0800, subps. 4 and 5
After May 13, 2012, the compliance date for 40 CFR pt. 63, subp. ZZZZ, the Permittee shall maintain records to document that each GP002 unit meets the criteria for stationary RICE subject to limited requirements in 40 CFR Section 63.6590(b)(3)(viii) and the definition of emergency stationary RICE under 40 CFR Section 63.6675.	40 CFR Section 63.6590 (b)(3)(viii); 40 CFR Section 63.6675; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: GP 003 Heart Hospital Natural Gas/No. 2 Fuel Oil Boilers (EU011-EU014)**Associated Items:** EU 011 Flexible Watertube Boiler 5

EU 012 Flexible Watertube Boiler 6

EU 013 Flexible Watertube Boiler 7

EU 014 Flexible Watertube Boiler 8

What to do	Why to do it
Emission limits apply to each emission unit individually	hdr
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60% opacity.	Minn. R. 7011.0510, subp. 2
Permitted Fuels: Natural gas and No. 2 fuel oil with a sulfur content not exceeding 0.015% by weight.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7005.0100, subp. 35a
Fuel Usage: less than or equal to 137,000 gallons/year of No. 2 distillate fuel oil, calculated monthly as a 12-month Rolling Sum.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Monthly No. 2 Fuel Oil Recordkeeping: By the third Tuesday of each month, the Permittee shall calculate and record the following: 1) The total No. 2 fuel oil usage during the previous month (in gallons), and 2) The 12-month rolling sum No. 2 fuel oil usage (in gallons) for the previous 12-month period by summing the monthly No. 2 fuel oil usage data for the previous 12 months.	Minn. R. 7007.0800, subps. 4 and 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.0015% by weight.	Minn. R. 7007.0800, subps. 4 and 5
Requirements under 40 CFR pt. 63, Subpart JJJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources Enforcement not delegated to MPCA.	hdr
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with the requirement to conduct a tune-up according to 40 CFR Section 63.11223(b); no later than March 21, 2012, or a later date as determined by EPA rulemaking to amend Subpart JJJJJJ.	40 CFR Section 63.11196(a)(1)
At all times the Permittee must operate and maintain affected boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenances records, and inspection of the source.	40 CFR Section 63.11205(a)
The Permittee must demonstrate initial compliance with each applicable work practice standard, management practice, or emission reduction measure no later than March 21, 2014 and according to the applicable provisions in 40 CFR Section 63.7(a)(2).	40 CFR Section 63.11210(c)
The Permittee must conduct a tune-up for each boiler biennially and keep records as required in 40 CFR Section 63.11225(c) to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.	40 CFR Section 63.11201(b); 40 CFR Section 63.11223(a); 40 CFR Section 63, subp. JJJJJJ, Table 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

<p>The Permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in (1) through (7) as follows:</p> <p>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).</p> <p>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.</p> <p>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.</p> <p>(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.</p> <p>(continued below)</p>	40 CFR Section 63.11223(b)
<p>(continued)</p> <p>(5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).</p> <p>(6) Maintain onsite and submit, if requested by the Administrator, biennial report containing the information in (6)(i) through (iii) below:</p> <p>(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.</p> <p>(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.</p> <p>(iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.</p> <p>(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.</p>	40 CFR Section 63.11223(b)
The Permittee must comply with the General Provisions as applicable in Table 8 of 40 CFR pt. 63, subp. JJJJJJ.	40 CFR Section 63.11235; 40 CFR pt. 63 subp. JJJJJJ, Table 8
RECORDKEEPING	hdr
<p>The Permittee must maintain the following records:</p> <p>(1) A copy of each notification and report that was submitted to comply with subpart JJJJJJ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR Section 63.10(b)(2)(xiv);</p> <p>(2) Records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR Section 63.11214 as follows:</p> <p>(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.</p> <p>(ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.</p> <p>(continued below)</p>	40 CFR Section 63.11225(c)
<p>(continued)</p> <p>(3) Records of the occurrence and duration of each malfunction of each boiler or of the associated air pollution control and monitoring equipment.</p> <p>(4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.</p>	40 CFR Section 63.11225(c)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

(continued)	40 CFR Section 63.11225(c)
<p>(5) Records of all inspection and monitoring data as required by 40 CFR Sections 63.11221 and 63.11222, and the information identified below for each required inspection or monitoring:</p> <p>(i) The date, place, and time of the monitoring event;</p> <p>(ii) Person conducting the monitoring.</p> <p>(iii) Technique or method used;</p> <p>(iv) Operating conditions during the activity;</p> <p>(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation;</p> <p>(vi) Maintenance or corrective action taken (if applicable).</p>	
Records must be in a form suitable and readily available for expeditious review, according to 40 CFR Section 63.10(b)(1). The Permittee must keep each record for 5 years following the date of each recorded action. The Permittee must keep each record onsite for at least 2 years after the date of each recorded action according to 40 CFR Section 63.10(b)(1). The Permittee may keep the records off site for the remaining 3 years.	40 CFR Section 63.11225(d)
REPORTING AND NOTIFICATION REQUIREMENTS	hdr
<p>The Permittee must prepare by March 1 every two years, and submit to the Administrator upon request, an biennial compliance certification report. The Permittee must submit the biennial compliance report by March 15 if the Permittee had any instance described by item 3 below. The biennial compliance certification report for the previous two calendar years must contain the information the following.</p> <p>(1) Company name and address.</p> <p>(2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of Subpart JJJJJJ.</p> <p>(3) Include a description of deviations from the applicable requirements during the reporting period, the time periods during which the deviations occurred, and the corrective actions taken.</p>	40 CFR Sections 63.11225(b)
The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR Section 63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR Section 63.11196. In addition to the information required in 40 CFR Section 63.9(h), the notification must include the following certifications of compliance, as applicable and signed by a responsible official: "This facility complies with the requirements in 40 CFR Section 63.11214 to conduct an initial tune-up of the boiler."	40 CFR Section 63.11225(a)(4)
The Permittee must conduct a performance tune-up according to 40 CFR pt. 63.11223(b) and submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted a tune-up of the boiler.	40 CFR Section 63.11214(b)
The Permittee must submit all of the notifications in 40 CFR Sections 63.7(b): 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) that apply by the dates specified in those sections.	40 CFR Section 63.11225(a)(1)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: GP 004 Natural Gas Boilers (10th Ave Bldg/Garage)

Associated Items: EU 019 Raypak H34001 (parking garage)
EU 020 Raypak H34001 (parking garage)
EU 021 Hydrotherm KN-30 #1(10th Ave-Lab)
EU 022 Hydrotherm KN-30 #2(10th Ave-Lab)
EU 023 Hydrotherm KN-30 #3(10th Ave-Lab)
EU 024 Hydrotherm KN-30 #4(10th Ave-Lab)
EU 025 Lattner#5 (10th Ave-Lab)
EU 026 Lattner#6 (10th Ave-Lab)
EU 028 Hydrotherm KN-30 #7(10th Ave)

What to do	Why to do it
Emission limits apply to each emission unit individually	hdr
Total Particulate Matter: less than or equal to 0.40 lbs/million Btu heat input . The potential to emit from each GP004 unit is 0.0078 lb/mmBtu due to equipment design and allowable fuels.	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity	Minn. R. 7011.0515, subp. 2
Fuel Type: Natural gas by design.	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: GP 005 Ethylene Oxide Sterilizers and Abator**Associated Items:** CE 001 Ethylene Oxide Abator

EU 029 Ethylene Oxide Sterilizer

EU 030 Ethylene Oxide Sterilizer

What to do	Why to do it
The Permittee shall vent emissions from the ethylene oxide sterilizers (EU029 and EU030) to control equipment meeting the requirements described in GP005.	Minn. Stat. Section 116.07, subd. 4a, Minn. R. 7007.0800, subps. 2 and 14
CONTROL EQUIPMENT REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Ethylene oxide: greater than or equal to 99.9 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the ethylene oxide abator any time that any ethylene oxide sterilizer controlled by the abator is(are) in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the abator (CE001) or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the abator. The Permittee shall keep a record of the type and date of any corrective action taken for the abator.	Minn. R. 7007.0800, subps. 4, 5, and 14
Operation and Maintenance of the Abator (CE001): The Permittee shall operate and maintain the abator in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
40 CFR pt. 63, subp. WWWW Requirements	hdr
Enforcement Not Delegated to MPCA	
Abbott operates two Ethylene Oxide Sterilizers, each of which is an existing affected source subject to the requirements in Subpart WWWW. Terms used in Subpart WWWW are defined at 40 CFR Section 63.10448.	40 CFR Section 63.10382 and 63.10448
The Permittee must sterilize full loads of items having a common aeration time, except under medically necessary circumstances. Medically necessary means circumstances that a hospital central services staff, a hospital administrator, or a physician concludes, based on generally accepted medical practices, necessitate sterilizing without a full load in order to protect human health. The Permittee must begin compliance with this requirement no later than December 29, 2008	40 CFR Section 63.10390 and 63.10448
The Permittee must submit an Initial Notification of Compliance Status certifying that the Permittee is venting the ethylene oxide emissions from each sterilization unit to an add-on air pollution control device. The Permittee must certify that the Permittee is operating the control device during all sterilization processes and in accordance with manufacturer's procedures.	40 CFR Section 63.10400
The Initial Notification of Compliance Status must be submitted no later than June 27, 2009. The Initial Notification of Compliance Status must include the information required in 40 CFR Section 63.10430. The Permittee must submit the Initial Notification of Compliance Status to: EPA Region V, Director, Air and Radiation Division, 77 West Jackson Blvd. Chicago, IL 60604-3507. The Permittee must also submit a copy of the Initial Notification of Compliance Status to the EPA's Office of Air Quality Planning and Standards at the addresses listed at 40 CFR Section 63.10430. The Permittee must keep a copy of the Initial Notification of Compliance Status submitted to demonstrate initial compliance.	40 CFR Sections 63.10402, 63.10430 and 63.10432; 40 CFR Section 63.13

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-14**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

<p>The records required in 40 CFR Section 63.10432 must be kept in a form suitable for expeditious review.</p> <p>The records required in 40 CFR Section 63.10432 must be kept for 5 years following the date of each record.</p> <p>The records required in 40 CFR Section 63.10432 must be kept onsite for at least 2 years after the date of each record. Each one of these records may be kept offsite for the remaining 3 years.</p>	<p>40 CFR Sections 63.10432, 63.10434, and 63.10(b)(1); Minn. R. 7019.0100, subp. 2(B)</p>
<p>Table 1 to Subpart WWWWW of Part 63 indicates which parts of the General provisions in 40 CFR Section 63.1 through 63.16 apply.</p>	<p>40 CFR Section 63.10440; 40 CFR Part 63 Subpart A</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-15**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

Subject Item: EU 027 Caterpillar 3516C (10th Ave-Lab)**Associated Items:** SV 021 Caterpillar 3516C

What to do	Why to do it
EMISSION LIMITS	hdr
Carbon Monoxide: less than or equal to 3.50 grams/kilowatt-hour	40 CFR Section 60.4205(b); 40 CFR Section 89.112; Minn. R. 7011.3520
Total Particulate Matter: less than or equal to 0.20 grams/kilowatt-hour	40 CFR Section 60.4205(b); 60.4205(b); 40 CFR Section 89.112; Minn. R. 7011.3520
NMHC + NOx: less or equal to than 6.40 grams/kilowatt-hour This is an average emission rate, not a maximum emission rate at all loads. Compliance is demonstrated by maintaining applicable certification from the manufacturer on file.	40 CFR Section 60.4205(b); 60.4205(b); 40 CFR Section 89.112; Minn. R. 7011.3520
Opacity: less than or equal to 20 percent opacity during the acceleration mode, less than 15 percent opacity during the lugging mode, and less than 50 percent opacity during the peaks in either the acceleration or lugging modes.	40 CFR Section 60.4205(b); 40 CFR Section 89.113; Minn. R. 7011.3520
Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input . The potential to emit from each GP002 unit is less than 0.002 lb/MMBtu due to equipment design and allowable fuels.	Minn. R. 7011.2300, subp. 2
OPERATING REQUIREMENTS	hdr
Permitted Fuel: No. 2 fuel oil with a sulfur content not exceeding 0.0015% by weight.	Minn. R. 7007.0800, subp. 2
Operating Hours: less than or equal to 300 hours/year using 12-month Rolling Sum for each generator.	Minn. R. 7007.0800, subp. 2
Operate and maintain EU027 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.	40 CFR Section 60.4206; Minn. R. 7011.3520
MONITORING AND RECORDKEEPING REQUIREMENTS	hdr
The Permittee shall keep records of fuel type and hourly usage on a monthly basis.	Minn. R. 7007.0800, subp. 2
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.0015% by weight.	Minn. R. 7007.0800, subps. 4 and 5
Fuel Use: EU027 may be operated only on diesel fuel that meets the requirements of 40 CFR Section 80.510(b) for nonroad diesel fuel: 15 ppm maximum sulfur content; Minimum cetane index of 40; and Maximum aromatic content of 35 volume percent	40 CFR Section 60.4207(b); 40 CFR Section 80.510(b); 40 CFR Section 63.6590(c); Minn. R. 7011.3520
The Permittee shall install a non-resettable hour meter prior to startup of EU027.	40 CFR Section 60.4209(a); 40 CFR Section 63.6590(c); Minn. R. 7011.3520
Hours of Operation Records: The Permittee shall maintain records of hours of operation on site that document that the unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 & 5
EU027 may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of EU027 in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted in 40 CFR Section 60.4211(e), is prohibited.	40 CFR Section 60.4211(e); 40 CFR Section 63.6590(c); Minn. R. 7011.3520
Maintain records of the operation of EU027 in emergency and non-emergency service that are recorded through the non-resettable hour meter. Record the time of operation and the reason EU027 was in operation during that time.	40 CFR Section 60.4214(b); 40 CFR Section 63.6590(c); Minn. R. 7011.3520

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-16**

12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

During every monthly test of EU027, record the following information: 1) the date, 2) the time the test was started, and 3) the time the test was completed.	Minn. R. 7007.0800, subps. 4 and 5
EU027 is a new affected source as defined under 40 CFR pt. 63, subp. ZZZZ, and the facility is an area source as defined at 40 CFR Section 63.2. The Permittee shall meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. IIII. No further requirements of 40 CFR pt. 63, subp. ZZZZ apply to EU027 at the time of permit issuance.	40 CFR Section 63.6590(c); Minn. R. 7011.8150

TABLE B: SUBMITTALS**B-1** 12/03/12

Facility Name: Abbott Northwestern Hospital
Permit Number: 05300061 - 002

Also, where required by an applicable rule or permit condition, send to the Permit Document Coordinator notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Send any application for a permit or permit amendment to:

Fiscal Services
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

TABLE B: RECURRENT SUBMITTALS**B-2** 12/03/12

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX I: Insignificant Activities and Applicable Requirements

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300061-002

The table below lists the insignificant activities that are currently at the facility and their associated general applicable requirements.

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
3(I)	<p>Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than:</p> <ol style="list-style-type: none">1. 4,000 lbs/year of carbon monoxide;2. 2,000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone; and3. 1,000 tons/year of CO₂e <p>• Abbott operates 2 natural gas-fired hot water heaters with a maximum heat input of 0.199 mMBTU/hr each at the 10th Avenue Building which qualify under this subpart.</p>	Minn. R. 7011.0510/0515

Appendix II: Exhaust Parameters and Emission Rates Used For Modeling

Facility Name: Abbott Northwestern Hospital

Permit Number: 05300060-002

Source ID	Stack ID	Source Description	MODELED EXHAUST PARAMETERS											
			Height		Diameter		Velocity		Gas Temp		Flow Rate		Stack Orientation	
			(ft)	(m)	(ft)	(m)	(ft/min)	(m/sec)	(°F)	(°K)	(acfm)	(m³/sec)	V/H ?	Capped?
EU01 EU02 EU03 EU04	SV01	Boiler 1 (Bros, 29 MMBtu/hr) Boiler 2 (Bros, 29 MMBtu/hr) Boiler 3 (Bros, 29 MMBtu/hr) Boiler 4 (Cleaver Brooks, 77 MMBtu/hr)	100.0	30.48	6.00	1.83	2,182	11.08	524	546	61,688	29.11	V	No
EU05	SV02	IC Engine 1 (685 bhp peaking)	20.0	6.10	0.67	0.20	10,313	52.391	955	786	3,600	1.70	V	No
EU06	SV03	IC Engine 2 (685 bhp peaking)	20.0	6.10	0.67	0.20	10,313	52.391	955	786	3,600	1.70	V	No
EU07	SV04	IC Engine 3 (685 bhp peaking)	20.0	6.10	0.67	0.20	10,399	52.828	915	764	3,630	1.71	V	No
EU08	SV05	IC Engine 4 (685 bhp peaking)	30.0	9.14	0.67	0.20	10,399	52.828	915	764	3,630	1.71	V	No
EU09	SV06	IC Engine 5 (890 bhp peaking)	35.0	10.67	0.67	0.20	11,050	56.135	950	783	5,455	2.57	45°	No
EU10	SV07	IC Engine 6 (355 bhp emergency)	20.0	6.10	0.42	0.13	23,395	118.84 7	980	800	3,190	1.51	V	No
EU11 EU12 EU13 EU14	SV08	Boiler 5 (Cleaver Brooks, 8.7 MMBtu/hr) Boiler 6 (Cleaver Brooks, 8.7 MMBtu/hr) Boiler 7 (Cleaver Brooks, 8.7 MMBtu/hr) Boiler 8 (Cleaver Brooks, 8.7 MMBtu/hr)	135.0	41.15	2.50	0.76	2,445	12.419	520	544	12,000	5.66	V	No
EU15	SV09	IC Engine 7 (1,135 bhp emergency)	36.0	10.97	0.92	0.28	9,361	47.553	895	753	6,160	2.91	V	No
EU16	SV10	IC Engine 8 (1,135 bhp emergency)	36.0	10.97	0.92	0.28	9,361	47.553	895	753	6,160	2.91	V	No
EU17	SV11	IC Engine 9 (1,135 bhp emergency)	36.0	10.97	0.92	0.28	9,361	47.553	895	753	6,160	2.91	V	No
EU18	SV12	IC Engine 10 (382 bhp emergency)	30.0	9.14	0.50	0.15	11,077	56.272	994	808	2,175	1.03	V	No
EU19	SV13	Raypak Boiler (4 MMBtu/hr)	100.0	30.48	3.50	1.07	113	0.573	350	450	1,085	0.51	V	No
EU20	SV14	Raypak Boiler (4 MMBtu/hr)	100.0	30.48	3.50	1.07	113	0.573	350	450	1,085	0.51	V	No
EU21	SV15	Lab Hot Water Boiler (3 MMBtu/hr)	119.0	36.27	0.75	0.23	1,456	0.001	180	355	643	0.30	V	Yes
EU22	SV16	Lab Hot Water Boiler (3 MMBtu/hr)	119.0	36.27	0.75	0.23	1,456	0.001	180	355	643	0.30	V	Yes
EU23	SV17	Lab Hot Water Boiler (3 MMBtu/hr)	119.0	36.27	0.75	0.23	1,456	0.001	180	355	643	0.30	V	Yes
EU24	SV18	Lab Hot Water Boiler (3 MMBtu/hr)	119.0	36.27	0.75	0.23	1,456	0.001	180	355	643	0.30	V	Yes
EU25	SV19	Lab Steam Boiler (Latner 1.7 MMBtu/hr)	118.0	35.97	1.00	0.30	543	2.758	300	422	426	0.20	V	No
EU26	SV20	Lab Steam Boiler (Latner 1.7 MMBtu/hr)	118.0	35.97	1.00	0.30	543	2.758	300	422	426	0.20	V	No
EU27	SV21	IC Engine (Lab Emergency Generator)	30.0	9.14	1.00	0.30	19,470	98.907	752	673	15,292	7.22	V	No
EU28	SV22	Lab Hot Water Boiler (3 MMBtu/hr)	119.0	36.27	0.75	0.23	1,456	0.001	180	355	643	0.30	V	Yes

			MODELED EMISSION RATES											
Source ID	Stack ID	Source Description	NOx		PM10		PM2.5		CO		LEAD		SO2	
			lb/hr	g/s	lb/hr	g/s	lb/hr	g/s	lb/hr	g/s	lb/hr	g/s	lb/hr	g/s
EU01 EU02 EU03 EU04	SV01	Boiler 1 Boiler 2 Boiler 3 Boiler 4	23.4286	2.9519	2.6943	0.3395	1.8157	0.2288	13.5059	1.7017	1.5E-03	1.9E-04	0.2495	0.0314
EU05	SV02	IC Engine 1	14.5779	1.8368	0.2610	0.0329	0.2533	0.0319	3.8723	0.4879	0.0E+00	0.0E+00	0.0069	0.0009
EU06	SV03	IC Engine 2	14.5779	1.8368	0.2610	0.0329	0.2533	0.0319	3.8723	0.4879	0.0E+00	0.0E+00	0.0069	0.0009
EU07	SV04	IC Engine 3	16.4013	2.0665	0.2937	0.0370	0.2850	0.0359	4.3566	0.5489	0.0E+00	0.0E+00	0.0078	0.0010
EU08	SV05	IC Engine 4	16.4013	2.0665	0.2937	0.0370	0.2850	0.0359	4.3566	0.5489	0.0E+00	0.0E+00	0.0078	0.0010
EU09	SV06	IC Engine 5	21.8669	2.7552	0.3916	0.0493	0.3799	0.0479	5.8084	0.7318	0.0E+00	0.0E+00	0.0104	0.0013
EU10	SV07	IC Engine 6	10.5514	1.3294	0.7417	0.0935	0.7417	0.0935	2.2730	0.2864	0.0E+00	0.0E+00	0.0036	0.0005
EU11 EU12 EU13 EU14	SV08	Boiler 5 Boiler 6 Boiler 7 Boiler 8	5.1200	0.6451	0.5888	0.0742	0.3968	0.0500	1.2800	0.1613	3.2E-04	4.1E-05	0.0545	0.0069
EU15	SV09	IC Engine 7	19.9360	2.5119	0.3570	0.0450	0.3464	0.0436	5.2955	0.6672	0.0E+00	0.0E+00	0.0094	0.0012
EU16	SV10	IC Engine 8	19.9360	2.5119	0.3570	0.0450	0.3464	0.0436	5.2955	0.6672	0.0E+00	0.0E+00	0.0094	0.0012
EU17	SV11	IC Engine 9	19.9360	2.5119	0.3570	0.0450	0.3464	0.0436	5.2955	0.6672	0.0E+00	0.0E+00	0.0094	0.0012
EU18	SV12	IC Engine 10	9.2469	1.1651	0.6500	0.0819	0.6500	0.0819	1.9920	0.2510	0.0E+00	0.0E+00	0.0032	0.0004
EU19	SV13	Raypak Boiler	0.4000	0.0504	0.0304	0.0038	0.0304	0.0038	0.3360	0.0423	2.0E-06	2.5E-07	0.0024	0.0003
EU20	SV14	Raypak Boiler	0.4000	0.0504	0.0304	0.0038	0.0304	0.0038	0.3360	0.0423	2.0E-06	2.5E-07	0.0024	0.0003
EU21	SV15	Lab Hot Water Boiler	0.3000	0.0378	0.0228	0.0029	0.0228	0.0029	0.2520	0.0318	1.5E-06	1.9E-07	0.0018	0.0002
EU22	SV16	Lab Hot Water Boiler	0.3000	0.0378	0.0228	0.0029	0.0228	0.0029	0.2520	0.0318	1.5E-06	1.9E-07	0.0018	0.0002
EU23	SV17	Lab Hot Water Boiler	0.3000	0.0378	0.0228	0.0029	0.0228	0.0029	0.2520	0.0318	1.5E-06	1.9E-07	0.0018	0.0002
EU24	SV18	Lab Hot Water Boiler	0.3000	0.0378	0.0228	0.0029	0.0228	0.0029	0.2520	0.0318	1.5E-06	1.9E-07	0.0018	0.0002
EU25	SV19	Lab Steam Boiler	0.1675	0.0211	0.0127	0.0016	0.0127	0.0016	0.1407	0.0177	8.4E-07	1.1E-07	0.0010	0.0001
EU26	SV20	Lab Steam Boiler	0.1675	0.0211	0.0127	0.0016	0.0127	0.0016	0.1407	0.0177	8.4E-07	1.1E-07	0.0010	0.0001
EU27	SV21	IC Engine (Lab Emergency Generator)	42.1000	5.3045	0.2300	0.0290	0.2300	0.0290	3.4500	0.4347	0.0E+00	0.0E+00	0.0293	0.0037
EU28	SV22	Lab Hot Water Boiler	0.3000	0.0378	0.0228	0.0029	0.0228	0.0029	0.2520	0.0318	1.5E-06	1.9E-07	0.0018	0.0002