

Attention:

Northwestern Memorial Hospital  
Attn: Cynthia Ferguson  
251 East Huron Street  
Chicago, Illinois 60611

State of Illinois

CLEAN AIR ACT PERMIT  
PROGRAM (CAAPP) PERMIT

[Title I and Title V Permit]

Source:

Northwestern Memorial Hospital  
251 East Huron Street  
Chicago, Illinois 60611

I.D. No.: 031600FMX  
Permit No.: 98020020

Permitting Authority:

Illinois Environmental Protection Agency  
Bureau of Air, Permit Section  
217/785-1705

**CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT**

[Title I and Title V Permit]

Type of Application: Renewal  
Purpose of Application: Renew Existing CAAPP Permit for 5 Years  
ID No.: 031600FMX  
Permit No.: 98020020  
Statement of Basis No.: 98020020-1311

Date Application Received: January 28, 2011  
Date Issued: May 19, 2014

Expiration Date: May 19, 2019  
Renewal Submittal Date: 9 Months Prior to May 19, 2019

Source Name: Northwestern Memorial Hospital  
Address: 251 East Huron Street  
City: Chicago  
County: Cook  
ZIP Code: 60611

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Justin Cameron at 217/785-1705.

Raymond E. Pilapil  
Acting Manager, Acting Permit Section  
Division of Air Pollution Control

REP:MTR:JTC:jws

cc: IEPA, Permit Section  
IEPA, FOS, Region 1  
Lotus Notes Database

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**Section 1 - Source Information**

**1. Addresses**

**Source**

Northwestern Memorial Hospital  
251 East Huron Street  
Chicago, Illinois 60611

**Owner**

Northwestern Memorial Hospital  
251 East Huron Street  
Chicago, Illinois 60611

**Operator**

Northwestern Memorial Hospital  
251 East Huron Street  
Chicago, Illinois 60611

**Permittee**

The Owner and Operator of the source as identified in this table.

**2. Contacts**

**Certified Officials**

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	<i>Name</i>	<i>Title</i>
<i>Responsible Official</i>	Robert Costello	Director, Operations - Operational Support Hub
<i>Delegated Authority</i>	No other individuals have been authorized by the IEPA.	N/A

**Other Contacts**

	<i>Name</i>	<i>Phone No.</i>	<i>Email</i>
<i>Source Contact</i>	Cynthia Ferguson	(312)-926-3161	cferguso@nmh.org
<i>Technical Contact</i>	Glenn Wentink	(708)-352-7730	grw.pe@att.net
<i>Correspondence</i>	Cynthia Ferguson	(312)-926-3161	cferguso@nmh.org
<i>Billing</i>	Cynthia Ferguson	(312)-926-3161	cferguso@nmh.org

**3. Single Source**

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

<i>I.D. No.</i>	<i>Permit No.</i>	<i>Single Source Name and Address</i>
N/A	N/A	N/A

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## Section 2 - General Permit Requirements

### 1. Prohibitions

- a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]
- b. After the applicable CAAPP permit or renewal application submittal date, as specified in Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]
- c. No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]
- d. Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

### 2. Emergency Provisions

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- a.
  - i. An emergency occurred and the source can identify the cause(s) of the emergency.
  - ii. The source was at the time being properly operated.
  - iii. The source submitted notice of the emergency to the IEPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
  - iv. During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.
- b. For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.
- c. In any enforcement proceeding, the source seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or

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upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

**3. General Provisions**

**a. Duty to Comply**

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

**b. Need to Halt or Reduce Activity is not a Defense**

It shall not be a defense for the source in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

**c. Duty to Maintain Equipment**

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7)(a) of the Act]

**d. Disposal Operations**

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

**e. Duty to Pay Fees**

- i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]
- ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]
- iii. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

**f. Obligation to Allow IEPA Surveillance**

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

- i. Enter upon the source's premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

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- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- iv. Sample or monitor any substances or parameters at any location at reasonable times:
  - A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
  - B. As otherwise authorized by the Act.
- v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

**g. Effect of Permit**

- i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:
  - A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.
  - B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.
  - C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.
  - D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.
- ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

**h. Severability Clause**

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

**4. Testing**

- a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

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any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]

- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

**5. Recordkeeping**

**a. Control Equipment Maintenance Records**

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

**b. Retention of Records**

- i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

**c. Availability of Records**

- i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.
- ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

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requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

**6. Certification**

**a. Compliance Certification**

- i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:
  - A. The identification of each term or condition of this permit that is the basis of the certification.
  - B. The compliance status.
  - C. Whether compliance was continuous or intermittent.
  - D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the IEPA Compliance Section. Addresses are included in Attachment 3.
- iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

**b. Certification by a Responsible Official**

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

**7. Permit Shield**

- a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after April 2, 2014 (date USEPA notice started), unless this permit has been modified to reflect such new requirements.
- b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

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- c. Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

**8. Title I Conditions**

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

- a. This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.
- b. This permit may contain conditions that reflect necessary revisions to requirements established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".
  - i. Revisions to original Title I permit conditions are incorporated into this permit through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
  - ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.
- c. This permit may contain conditions that reflect new requirements for this source that would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".
  - i. The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
  - ii. Any Title I conditions that are newly incorporated shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

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## 9. Reopening and Revising Permit

### a. Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

### b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

- i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;
- iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or
- iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

### c. Inaccurate Application

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

### d. Duty to Provide Information

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

## 10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

## 11. Permit Renewal

- a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(1) and (o) of the Act]

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- b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

**12. Permanent Shutdown**

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

**13. Startup, Shutdown, and Malfunction**

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

## Section 3 - Source Requirements

### 1. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

#### a. Fugitive Particulate Matter

- i. Pursuant to 35 IAC 212.301 and 35 IAC 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source unless the wind speed is greater than 25 mph.
- ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particulate matter from the source to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

#### b. Emissions Reduction Market System (ERMS)

Pursuant to 35 IAC Part 205, ERMS seasonal emissions of VOM during the seasonal allotment period from May 1 through September 30 shall not exceed 10 tons. (See Section 7.2)

#### c. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.
- ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.
- iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.
- iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.
- v. Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and recordkeeping requirements of 40 CFR 82.166.

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**d. Asbestos Demolition and Renovation**

- i. Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the Owner or Operator must file an original 10-day notice of intent to renovate or demolish pursuant to Condition 3.1(d)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of \$150.
- ii. Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).
- iii. Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

**e. Future Emission Standards**

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

**2. Applicable Plans and Programs**

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

**a. Fugitive PM Operating Program**

- i. Pursuant to 35 IAC 212.309, this source shall be operated under the provisions of Fugitive PM Operating Program prepared by the Permittee and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). The Permittee shall comply with the Fugitive PM Operating Program and any amendments to the Fugitive PM Operating Program submitted pursuant to Condition 3.2(a)(ii). As a minimum, the Fugitive PM Operating Program shall include provisions identified in 35 IAC 212.310(a) through (g) and the following:
  - A. A detailed description of the best management practices utilized to achieve compliance with applicable requirements.
  - B. Estimated frequency of application of any dust suppressants by location.
  - C. Such other information as may be necessary to facilitate the IEPA's review of the Fugitive PM Operating Program.
- ii. Pursuant to 35 IAC 212.312, the Fugitive PM Operating Program shall be amended from time to time by the Permittee so that the Fugitive PM Operating Program is current. Such amendments shall be consistent with the requirements set forth by this Condition 3.2(a) and shall be submitted to the IEPA within 30 days of such amendment. Any future revision to the Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the

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Permittee of a deficiency with any revision to the Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

- iii. The Fugitive PM Operating Program, as submitted by the Permittee on November 20, 2013, is incorporated herein by reference. The document constitutes the formal Fugitive PM Operating Program required under 35 IAC 212.310, addressing the control of fugitive particulate matter emissions from operations located at the facility that are subject to 35 IAC 212.309.
- iv. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Fugitive PM Operating Program, any amendments or revisions to the Fugitive PM Operating Program (as required by Condition 3.2(a)), and the Permittee shall also keep a record of activities completed according to the Fugitive PM Operating Program.

**b. PM<sub>10</sub> Contingency Measure Plan**

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM<sub>10</sub> Contingency Measure Plan reflecting the PM<sub>10</sub> emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM<sub>10</sub> Contingency Measure Plan.

**c. Episode Action Plan**

- i. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the IEPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- ii. The Permittee shall immediately implement the appropriate steps described in the Episode Action Plan should an air pollution alert or emergency be declared, as required by 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D.
- iii. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the Episode Action Plan, a revised Episode Action Plan shall be submitted to the IEPA for review within 30 days of the change and is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the revision. In the event that the IEPA notifies the Permittee of a deficiency with any revision to the Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.
- iv. The Episode Action Plan, as submitted by the Permittee on 10/31/2013, is incorporated herein by reference. The document constitutes the formal Episode Action Plan required by 35 IAC 244.142, addressing the actions that will be implemented to reduce SO<sub>2</sub>, PM<sub>10</sub>, NO<sub>2</sub>, CO and VOM emissions from various emissions units in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- v. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Episode Action Plan, any amendments or revisions to the Episode Action Plan (as required by Condition 3.2(c)), and the Permittee shall also keep a record of activities completed according to the Episode Action Plan.

**d. Risk Management Plan (RMP)**

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Permittee shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

**3. Title I Requirements**

As of the date of issuance of this permit, there are no source-wide Title I requirements that need to be included in this Condition.

**4. Synthetic Minor Limits**

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:
  - I. Requirements in Conditions 3.1(a)(i), 3.1(b), 3.1(c), 3.1(d), and 3.1(e).
  - II. Requirements in Conditions 3.2(a), 3.2(b), 3.2(c), and 3.2(d).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.
- iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

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**b. Semiannual Reporting**

- i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

<u>Monitoring Period</u>	<u>Report Due Date</u>
January through June	July 31
July through December	January 31

- ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

**c. Annual Emissions Reporting**

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

## Section 4 - Emission Unit Requirements

### 4.1 Boilers: Natural Gas-Firing Mode (Subject to NSPS Dc)

#### 1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP	September 1997	N/A	None	None
Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP	January 2006	N/A	None	None

Note: These boilers are the same emission units referenced in Section 4.2. These units have an additional mode of operation, Fuel Oil Firing Mode, which is addressed in Section 4.2. In this section, during the firing of natural gas, the boilers are referred to as "the natural gas-fired boilers".

#### 2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act. In addition, these emission units shall comply with the applicable requirements in Section 5.1(a).

##### a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided by 35 IAC 212.123(b).

##### ii. Compliance Method (Opacity Requirements)

###### Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each boiler in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the boiler, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

###### Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any

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corrective action taken including if the corrective action took place within 4 hours of the observation.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

**b. i. Particulate Matter Requirements (PM)**

A. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/hr)</u>
PM/PM <sub>10</sub>	0.3

II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
PM/PM <sub>10</sub>	1.9

B. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/hr)</u>
PM/PM <sub>10</sub>	0.3

II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
PM/PM <sub>10</sub>	3.3

**ii. Compliance Method (PM Requirements)**

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

**Recordkeeping**

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, ton/mo and ton/yr, of PM from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

c. i. Sulfur Dioxide Requirements (SO<sub>2</sub>)

A. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/hr)</u>
SO <sub>2</sub>	0.1

II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
SO <sub>2</sub>	0.4

B. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/hr)</u>
SO <sub>2</sub>	0.1

II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
SO <sub>2</sub>	0.3

ii. Compliance Method (SO<sub>2</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, ton/mo and ton/yr, of SO<sub>2</sub> from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

d. i. Volatile Organic Material Requirements (VOM)

A. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
VOM	0.020	0.5

II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
VOM	3.0

B. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
VOM	0.020	0.5

II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
VOM	6.5

ii. Compliance Method (VOM Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

A. Sufficient monitoring is addressed in Condition 4.1.2(i) (ii) (B) and (h) (i) (B & C).

Recordkeeping

B. Pursuant to 39.5(7) (b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of VOM from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

e. i. Carbon Monoxide Requirements (CO)

A. Pursuant to 35 IAC 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

B. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
CO	0.045	1.1

II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
CO	6.9

C. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
CO	0.083	2.1

II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
CO	27.3

ii. Compliance Method (CO Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

A. Sufficient monitoring is addressed in Condition 4.1.2(i)(ii)(B) and (h)(i)(B & C).

Recordkeeping

B. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of CO from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr,

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each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

- II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**f. i. Nitrogen Oxide Requirements (NO<sub>x</sub>)**

- A. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
NO <sub>x</sub>	0.041	1.0

- II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
NO <sub>x</sub>	6.6

- B. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
NO <sub>x</sub>	0.1	2.5

- II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
NO <sub>x</sub>	32.5

ii. Compliance Method (NO<sub>x</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- A. Sufficient monitoring is addressed in Condition 4.1.2(i)(ii)(B) and (h)(i)(B & C).

Recordkeeping

- B. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

- I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of NO<sub>x</sub> from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr,

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each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

- II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**g. i. Hazardous Air Pollutant Requirements (HAP)**

- A. I. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
Individual HAP	0.010	0.3
Total HAP	0.020	0.5

- II. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
Individual HAP	1.5
Total HAP	3.0

- B. I. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
Individual HAP	0.010	0.3
Total HAP	0.020	0.5

- II. Pursuant to Construction Permit #06010025, for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of natural gas, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
Individual HAP	3.2
Total HAP	6.5

**ii. Compliance Method (HAP Requirements)**

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

**Recordkeeping**

- A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

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- I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of individual and total HAP from each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.
- II. The hours of operation for each of the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**h. i. Operational and Production Requirements**

- A. Pursuant to Construction Permit #06010025, the total natural gas usage for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" shall not exceed 375 million scf per year. [T1]
- B. Pursuant to Construction Permit #06010025, the total natural gas usage for the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)" shall not exceed 650 million scf per year. [T1]
- C. Pursuant to Section 39.5(7)(a) of the Act, when a boiler is fired using natural gas, pipeline quality natural gas shall be the only fuel fired by the boiler.

**ii. Compliance Method (Operational and Production Requirements)**

**Recordkeeping**

- A. I. Pursuant to 40 CFR 60.48c(g)(1), except as provided below, the Permittee of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day; or
- II. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), above, the Permittee of an affected facility that combusts only natural gas or fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard or fuels not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the amount of each fuel combusted during each calendar month; or
- III. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), above, the Permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas or distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record (e.g., a fuel certification from the supplier) demonstrating that the natural gas fired in the boilers meets the requirements of pipeline quality natural gas.
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record of the amount of natural gas fired in the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)" and in the "Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)", scf/mo and scf/yr.

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**i. i. Work Practice Requirements**

A. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the boilers in a manner consistent with good air pollution control practice for minimizing emissions.

**ii. Compliance Method (Work Practice Requirements)**

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boilers and associated auxiliary equipment.

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall perform a "simple" combustion evaluation on each boiler at least every 2 years.

Recordkeeping

B. Pursuant to 40 CFR 60.7(b), the Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boilers.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each combustion evaluation performed. These records shall include, at a minimum: date and time inspections were performed, name(s) of personnel performing evaluation(s), identification of equipment being evaluated, findings of the evaluation(s) (e.g., condition of burners), and a description of any maintenance and repair activities performed as a result of the evaluation, if any, including if the activity resulted in a modification or reconstruction of the piece of equipment.

<b>3. Non-Applicability Determinations</b>
--------------------------------------------

a. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the boilers are not located at a major source of HAP.

b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are considered gas-fired boilers, pursuant to 40 CFR 63.11195(e), as defined in 40 CFR 63.11237: gas-fired boilers includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. (Also See Section 4.2.2(h))

c. The boilers are not subject to 35 IAC 214.301 because the boilers are not by definition process emission units.

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- d. The boilers are not subject to 35 IAC 217.141 because the boilers do not have an actual heat input equal to or greater than 250 mmBtu/hr.
- e. The boilers are not subject to 35 IAC 217.150 because the individual boilers have a Potential-to-Emit (PTE) of NO<sub>x</sub> which is less than 15 tons per year and less than 5 tons per ozone season. (See Condition 5.1(b)(ii)(A))
- f. The boilers are not subject to the requirements of 35 IAC 218.301 and 302, Use of Organic Material, because, pursuant to 35 IAC 218.303, these regulations shall not apply to fuel combustion emission sources.
- g. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

**4. Other Requirements**

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

**a. Start-up, Shutdown, and Malfunction Breakdown Requirements**

i. Authorization for State Requirements

A. Start-up Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during startup as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

B. Malfunction Breakdown Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during malfunction as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.
- ii. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures shall:  
[T1]
  - 1. With respect to malfunction, identify and address likely malfunction events with specific programs of corrective actions, and provide that upon occurrence of a malfunction that

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will result in emissions in excess of the applicable T1 limits in Conditions 4.1.2(b)(i)(A), 4.1.2(c)(i)(A), 4.1.2(d)(i)(A), 4.1.2(e)(i)(B), 4.1.2(f)(i)(A), and 4.1.2(g)(i)(A),, as soon as practicable, repair the affected equipment, reduce the operating rate of the boiler or remove the boiler from service so that excess emissions cease. [T1]

2. Consistent with the above, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall begin shutdown of the boiler within 4 hours, unless the malfunction is expected to be repaired within 8 hours or such shutdown could threaten the safety of personnel or equipment. In such case, shutdown of the system shall be undertaken when it is apparent that repair will not be accomplished within 8 hours or shutdown will not endanger the safety of personnel or equipment. In no case shall shutdown of the boiler be delayed solely for the economic benefit of the Permittee. [T1]

C. Shutdown Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during shutdown as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
  - I. Requirements in Conditions 4.1.2(a)(i), 4.1.2(b)(i), 4.1.2(c)(i), 4.1.2(d)(i), 4.1.2(e)(i), 4.1.2(f)(i), 4.1.2(g)(i), 4.1.2(h)(i), and 4.1.2(i)(i).
  - II. Requirements in Conditions 4.1.4(a)(i)(A), 4.1.4(a)(i)(B), and 4.1.4(a)(i)(C).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.

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- B. Emission unit(s) and/or operation involved.
- C. The duration of the event.
- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.

**4.2 Boilers: Fuel Oil Firing Mode (Subject to NSPS Dc)**

**1. Emission Units and Operations**

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP	September 1997	N/A	None	None
Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP	January 2006	N/A	None	None

Note: These boilers are the same emission units referenced in Section 4.1. These units have an additional mode of operation, Natural Gas-Firing Mode, which is addressed in Section 4.1. In this section, during the firing of fuel oil, the boilers are referred to as "the fuel oil-fired boilers".

**2. Applicable Requirements**

For the emission units in Condition 4.2.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act. In addition, these emission units shall comply with the applicable requirements in Section 5.1(a).

**a. i. Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided by 35 IAC 212.123(b).

**ii. Compliance Method (Opacity Requirements)**

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, in the event of a natural gas curtailment or natural gas supply emergency that results in the firing of fuel oil in any boiler(s) for a duration of more than 48 hours, the Permittee shall perform a Method 9 observation of the boiler(s) while firing fuel oil in the respective boiler(s); in accordance with the following:

1. These opacity observations shall be at least 30 minutes in duration.

With the following exception: If the time elapsed from the point at which these observations began to the point at which fuel oil firing is ceased is less than 30 minutes, these observations must only be performed for this duration (i.e., from the point at which these observations began to the point at which fuel oil firing ends).

2. If during any calendar year, there are multiple events resulting in the firing of fuel oil in a boiler, the Permittee shall only be required to perform one such observation per boiler per year.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each opacity observation performed. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing

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personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with Method 9.
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the type of fuel fired in each boiler during each observation required in Condition 4.2.2(a)(ii)(A).

**b. i. Particulate Matter Requirements (PM)**

A. Pursuant to 35 IAC 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).

B. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
PM/PM <sub>10</sub>	0.024	0.6

II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
PM/PM <sub>10</sub>	0.3

C. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
PM/PM <sub>10</sub>	0.024	0.6

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
PM/PM <sub>10</sub>	0.5

**ii. Compliance Method (PM Requirements)**

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

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Recordkeeping

- A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:
  - I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of PM from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.
  - II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**c. i. Sulfur Dioxide Requirements (SO<sub>2</sub>)**

- A. Pursuant to 40 CFR 60.42c(d), no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/mmBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.
- B. Pursuant to 35 IAC 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- C. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
SO <sub>2</sub>	0.302	7.4

- II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
SO <sub>2</sub>	3.7

- D. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
SO <sub>2</sub>	0.294	7.4

**Section 4 - Emission Unit Requirements**  
**4.2 - Boilers: Fuel Oil Firing Mode (Subject to NSPS Dc)**

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
SO <sub>2</sub>	5.8

ii. Compliance Method (SO<sub>2</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Monitoring

A. Pursuant to 40 CFR 60.44c(g), for oil-fired affected facilities where the Permittee seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the Permittee of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).

Recordkeeping

B. Pursuant to 40 CFR 60.48c(e)(11), the Permittee of each affected boiler subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required 40 CFR 60.48c(d), including the following information:

I. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described in 40 CFR 60.48c(f)(1). In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the Permittee of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

II. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:

1. The name of the oil supplier;
2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
3. The sulfur content or maximum sulfur content of the oil.

C. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of SO<sub>2</sub> from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**d. i. Volatile Organic Material Requirements (VOM)**

A. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
VOM	0.032	0.8

II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
VOM	0.4

B. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
VOM	0.032	0.8

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
VOM	0.6

**ii. Compliance Method (VOM Requirements)**

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

**Recordkeeping**

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of VOM from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

e. i. Carbon Monoxide Requirements (CO)

A. Pursuant to 35 IAC 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

B. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
CO	0.069	1.7

II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
CO	0.9

C. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
CO	0.036	0.9

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
CO	3.4

ii. Compliance Method (CO Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of CO from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**f. i. Nitrogen Oxide Requirements (NO<sub>x</sub>)**

A. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
NO <sub>x</sub>	0.192	4.7

II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
NO <sub>x</sub>	2.3

B. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
NO <sub>x</sub>	0.143	3.6

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
NO <sub>x</sub>	2.7

ii. Compliance Method (NO<sub>x</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of NO<sub>x</sub> from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

g. i. Hazardous Air Pollutant Requirements (HAP)

A. I. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
Individual HAP	0.016	0.4
Total HAP	0.032	0.8

II. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
Individual HAP	0.4
Total HAP	0.4

B. I. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, short-term emissions from each boiler shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(lb/mmBtu)</u>	<u>(lb/hr)</u>
Individual HAP	0.031	0.8
Total HAP	0.061	1.5

II. Pursuant to Construction Permit #06010025, for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", during the firing of distillate oil, annual emissions from the affected boilers shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Ton/Yr)</u>
Individual HAP	0.3
Total HAP	0.6

ii. Compliance Method (HAP Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, lb/mmBtu, ton/mo and ton/yr, of HAP from each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Three Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and each of the "Five Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", hr/mo.

**h. i. Operational and Production Requirements**

A. Pursuant to Construction Permit #06010025, the total distillate oil usage for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", shall not exceed 175,000 gallons per year. [T1]

B. Pursuant to Construction Permit #06010025, the total distillate oil usage for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", shall not exceed 274,000 gallons per year. [T1]

C. I. Pursuant to Section 39.5(7)(a) of the Act, when a boiler is fired using fuel oil, ultra-low sulfur diesel fuel shall be the only fuel fired by the boiler.

II. Boilers BLR #4, BLR #5, and BLR #7 are authorized to fire #2 distillate fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. [T1N]

III. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [T1N]

**ii. Compliance Method (Operational and Production Requirements)**

**Recordkeeping**

A. I. Pursuant to 40 CFR 60.48c(g)(1), except as provided below, the Permittee of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day;

II. Pursuant to 40 CFR 60.48c(g)(2), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), above, the Permittee of an affected facility that combusts only natural gas or fuels using fuel certification in 40 CFR 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard may elect to record and maintain records of the amount of each fuel combusted during each calendar month; or

III. Pursuant to 40 CFR 60.48c(g)(3), as an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), above, the Permittee of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas or distillate oil meeting the most current requirements in 40 CFR 60.42c to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the following:

I. Duration, date, and reason (e.g., testing or natural gas curtailment) for firing of fuel oil in any boiler.

II. The total distillate oil usage for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)" and for the "Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)", gal/mo and gal/yr.

**i. i. Work Practice Requirements**

A. Pursuant to 40 CFR 60.11(d), at all times, the Permittee shall maintain and operate the boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

**ii. Compliance Method (Work Practice Requirements)**

**Monitoring**

A. Pursuant to Section 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boilers and associated auxiliary equipment.

**Recordkeeping**

B. Pursuant to 40 CFR 60.7(b), the Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boilers.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

**3. Non-Applicability Determinations**

- a. i. The boilers are not subject to the requirements for opacity standards of 40 CFR 60.43c, because the boilers are not combusting oil in a boiler with a heat input capacity of 30 mmBtu/hr or greater, pursuant to 40 CFR 60.43c(c).
- ii. The boilers are not subject to the requirements for continuous opacity monitoring of 40 CFR 60.47c(a), because the boilers are not subject to the opacity standards under 40 CFR 60.43c, pursuant to 40 CFR 60.47c(a).
- b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the boilers are not located at a major source of HAP.
- c. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are considered gas-fired boilers, pursuant to 40 CFR 63.11195(e), as defined in 40 CFR 63.11237: gas-fired boilers includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. (Also See Section 4.2.2(h))
- d. The boilers are not subject to 35 IAC 214.301 because the boilers are not by definition process emission units.
- e. The boilers are not subject to 35 IAC 217.141 because the boilers do not have an actual heat input equal to or greater than 250 mmBtu/hr.

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- f. The boilers are not subject to 35 IAC 217.150 because the individual boilers have a Potential-to-Emit (PTE) of NO<sub>x</sub> which is less than 15 tons per year and less than 5 tons per ozone season. (See Condition 5.1(b)(ii)(A))
- g. The boilers are not subject to the requirements of 35 IAC 218.301 and 302, Use of Organic Material, because, pursuant to 35 IAC 218.303, these regulations shall not apply to fuel combustion emission sources.
- h. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

**4. Other Requirements**

For the emission units in Condition 4.2.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

**a. Start-up, Shutdown, and Malfunction Breakdown Requirements**

i. Authorization for State Requirements

A. Start-up Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during startup as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

B. Malfunction Breakdown Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during malfunction as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

- ii. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures shall:  
[T1]

- 1. With respect to malfunction, identify and address likely malfunction events with specific programs of corrective actions, and provide that upon occurrence of a malfunction that will result in emissions in excess of the applicable T1 limits in Conditions 4.2.2(b)(i)(B), 4.2.2(c)(i)(C) 4.2.2(d)(i)(A) 4.2.2(e)(i)(B) 4.2.2(f)(i)(A) and 4.2.2(g)(i)(A), as soon as practicable, repair the affected equipment, reduce the

operating rate of the boiler or remove the boiler from service so that excess emissions cease. [T1]

2. Consistent with the above, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall begin shutdown of the boiler within 4 hours, unless the malfunction is expected to be repaired within 8 hours or such shutdown could threaten the safety of personnel or equipment. In such case, shutdown of the system shall be undertaken when it is apparent that repair will not be accomplished within 8 hours or shutdown will not endanger the safety of personnel or equipment. In no case shall shutdown of the boiler be delayed solely for the economic benefit of the Permittee. [T1]

C. Shutdown Requirements

- i. Pursuant to Construction Permit #06010025, for the "Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)", the Permittee shall operate the boilers in accordance with good air pollution control practice to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall address provisions for review of relevant operating parameters of the boiler systems during shutdown as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.

<b>5. Reporting Requirements</b>
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The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
  - I. Requirements in Conditions 4.2.2(a)(i), 4.2.2(b)(i), 4.2.2(c)(i), 4.2.2(d)(i), 4.2.2(e)(i), 4.2.2(f)(i), 4.2.2(g)(i), 4.2.2(h)(i), and 4.2.2(i)(i).
  - II. Requirements in Conditions 4.2.4(a)(i)(A), 4.2.4(a)(i)(B), and 4.2.4(a)(i)(C).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.

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- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.

**b. Federal Reporting**

- i. Pursuant to 40 CFR 60.48c(d), the Permittee of each affected facility subject to the fuel oil sulfur limits under 40 CFR 60.42c shall submit reports to the Administrator.
- ii. Pursuant to 40 CFR 60.48c(e)(11), the Permittee of each affected facility subject to the fuel oil sulfur limits under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information:
  - A. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(e)(f)(1). In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
- iii. Pursuant to 40 CFR 60.48c(f)(1), fuel supplier certification shall include the following information for distillate oil:
  - A. The name of the oil supplier;
  - B. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
  - C. The sulfur content or maximum sulfur content of the oil.

**4.3 Natural Gas-Fired Boilers (Not Subject to NSPS Dc)**

**1. Emission Units and Operations**

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)	CO, NO <sub>x</sub> , and GHG	2012	N/A	None	None

**2. Applicable Requirements**

For the emission units in Condition 4.3.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

**a. i. Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided by 35 IAC 212.123(b).

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each boiler in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the boiler, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

**b. i. Carbon Monoxide Requirements (CO)**

A. Pursuant to Construction Permit #12100011, CO emissions from the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" shall not exceed the following limits: [T1]

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**Section 4 - Emission Unit Requirements**  
**4.3 - Natural Gas-Fired Boilers (Not Subject to NSPS Dc)**

(lb/hr, each)                      (ton/year, total)

0.5                                              11.1

ii. Compliance Method (CO Requirements)

Compliance with the annual limits shall be determined from a running total of 12 months of data.

A. Sufficient monitoring is addressed in Condition 4.1.2(f) (ii) (B).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of CO emissions from the boilers, including supporting calculations (pounds/hour and ton/year).

c. i. **Nitrogen Oxide Requirements (NO<sub>x</sub>)**

A. Pursuant to Construction Permit #12100011, NO<sub>x</sub> emissions from the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" shall not exceed the following limits: [T1]

(lb/hr, each)                      (ton/year, total)

0.6                                              13.2

ii. Compliance Method (NO<sub>x</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

A. Sufficient monitoring is addressed in Condition 4.1.2(f) (ii) (B).

Recordkeeping

B. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, ton/mo and ton/yr, of NO<sub>x</sub> from each of the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)", with the supporting calculations.

II. The hours of operation for each of the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)", hr/mo.

d. i. **Greenhouse Gas Requirements (GHG)**

A. Pursuant to Construction Permit #12100011, GHG emissions from the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" shall not exceed the following limits: [T1]

(ton/year, total)

20,000

ii. Compliance Method (GHG Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

I. The monthly and annual emissions, ton/mo and ton/yr, of GHG from the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)", with the supporting calculations.

e. i. **Operational and Production Requirements**

A. Pursuant to Section 39.5(7)(a) of the Act, pipeline quality natural gas shall be the only fuel fired in the boilers.

B. Pursuant to Construction Permit #12100011, the rated heat input capacity of each boiler shall not exceed 10 mmBtu/hour. [T1]

ii. Compliance Method (Operational and Production Requirements)

A. Pursuant to Section 39.5(7)(b), the Permittee shall maintain records of the following:

I. The type of fuel fired in each boiler.

II. A file containing a record of the maximum design heat input capacity of each affected boiler, mmBtu/hr, with supporting documentation.

f. i. **Work Practice Requirements**

A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain and operate the boilers in a manner consistent with safety and good air pollution control practice for minimizing emissions.

ii. Compliance Method (Work Practice Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boilers and associated auxiliary equipment.

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall perform a "simple" combustion evaluation on each boiler at least every 4 years.

Recordkeeping

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each combustion evaluation performed. These records shall include, at a minimum: date and time inspections were performed, name(s) of personnel performing evaluation(s), identification of equipment being evaluated, findings of the evaluation(s) (e.g., condition of burners), and a description of any maintenance and repair activities performed as a result of the evaluation, if any, including if the activity resulted in a modification or reconstruction of the piece of equipment.

**3. Non-Applicability Determinations**

- a. Pursuant to 40 CFR 60.40c(a), the "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subparts Dc, because each boiler has a maximum design heat input capacity less than 10 mmBtu/hr.
- b. The "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the boilers are not located at a major source of HAP.
- c. The "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Area Sources: Industrial, Commercial, and Institutional Boilers, 40 CFR Part 63 Subpart JJJJJJ, because, pursuant to 40 CFR 63.11195(e), the boilers are considered gas-fired boilers, as defined in 40 CFR 63.11237, and burn only natural gas.
- d. The boilers are not subject to 35 IAC 214.301 because the boilers are not by definition process emission units.
- e. The "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to 35 IAC 216.121, the CO emission standard, because each boiler has a maximum design heat input capacity less than 10 mmBtu/hr.
- f. The "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to 35 IAC 217.150 because the individual boilers have a Potential-to-Emit (PTE) of NO<sub>x</sub> which is less than 15 tons per year and less than 5 tons per ozone season.
- g. The "Five Natural Gas-Fired Boilers (6.0 mmBtu/hr, each)" are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

**4. Other Requirements**

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

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**Section 4 - Emission Unit Requirements**  
**4.3 - Natural Gas-Fired Boilers (Not Subject to NSPS Dc)**

- I. Requirements in Conditions 4.3.2(a)(i), 4.3.2(b)(i), 4.3.2(c)(i), 4.3.2(d)(i), 4.3.2(e)(i), and 4.3.2(f)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.

**4.4 Emergency Generator Engines (Subject to NSPS IIII)**

**1. Emission Units and Operations**

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Two Emergency Diesel Generator Engines (1,500 kW, each)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , and NMHC	November 2012	N/A	None	None

**2. Applicable Requirements**

For the emission units in Condition 4.4.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

**a. i. Opacity Requirements**

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided by 35 IAC 212.123(b).

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each engine in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the engine, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

**b. i. Particulate Matter Requirements (PM)**

A. Pursuant to 40 CFR 60.4205(b), the Permittee shall comply with the following PM emission standard, as specified in 40 CFR 40 89.112(a):

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<u>(g/kW-hr)</u>	<u>(g/bhp-hr)</u>
0.20	(0.15)

ii. Compliance Method (PM Requirements)

- A. Pursuant to 40 CFR 60.4206, the Permittee shall operate and maintain stationary CI ICE that achieves the emission standards as required in 60.4205 over the entire life of the engine.
- B. Pursuant to 40 CFR 60.4211(c), the Permittee shall demonstrate compliance with the applicable NSPS emission standards for the affected engines by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The affected engines must be installed and configured according to the manufacturer's specifications.

Recordkeeping

- C. Pursuant to Section 39.5(b) of the Act, the Permittee shall maintain records of PM emissions including supporting calculations in g/kW-hr (g/HP-hr).

c. i. **Sulfur Dioxide Requirements (SO<sub>2</sub>)**

- A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

ii. Compliance Method (SO<sub>2</sub> Requirements)

The periodic monitoring requirements sufficient to meet 39.5(7)(f) of the Act are addressed by the operational and production requirements in Condition 4.1.2(f)(i)(A), which requires the use of ultra-low sulfur diesel fuel.

d. i. **Carbon Monoxide Requirements (CO)**

- A. Pursuant to 40 CFR 60.4205(b), the Permittee shall comply with the following CO emission standard, as specified in 40 CFR 40 89.112(a):

<u>(g/kW-hr)</u>	<u>(g/bhp-hr)</u>
3.5	(2.6)

- B. Pursuant to Construction Permit #12100011, CO emissions from each of the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall not exceed the following limits: [T1]

<u>(lb/hr)</u>	<u>(ton/yr)</u>
11.6	2.9

- C. Pursuant to Construction Permit #12100011, combined CO emissions the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall not exceed the following limits: [T1]

<u>(ton/yr)</u>
5.8

ii. Compliance Method (CO Requirements)

Compliance with the annual limits shall be determined from a running total of 12 months of data.

- A. Pursuant to 40 CFR 60.4206, the Permittee shall operate and maintain stationary CI ICE that achieves the emission standards as required in 60.4205 over the entire life of the engine.
- B. Pursuant to 40 CFR 60.4211(c), the Permittee shall demonstrate compliance with the applicable NSPS emission standards for the affected engines by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The affected engines must be installed and configured according to the manufacturer's specifications.

Recordkeeping

- C. Pursuant to Section 39.5(b) of the Act, the Permittee shall maintain records of CO emissions including supporting calculations in g/kW-hr (g/bhp-hr), lb/hr and ton/year.

e. i. **Nitrogen Oxide Requirements (NO<sub>x</sub>) and/or Non-methane Hydrocarbon (NMHC)**

- A. Pursuant to 40 CFR 60.4205(b), the Permittee shall comply with the following NO<sub>x</sub> + NMHC emission standard, as specified in 40 CFR 40 89.112(a):

<u>(g/kW-hr)</u>	<u>(g/bhp-hr)</u>
6.4	(4.8)

- B. Pursuant to Construction Permit #12100011, NO<sub>x</sub> emissions from each of the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall not exceed the following limits: [T1]

<u>(lb/hr)</u>	<u>(ton/yr)</u>
21.2	5.3

- C. Pursuant to Construction Permit #12100011, combined NO<sub>x</sub> emissions the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall not exceed the following limits: [T1]

<u>(ton/yr)</u>
10.6

ii. Compliance Method (NO<sub>x</sub> and/or NMHC Requirements)

Compliance with the annual limits shall be determined from a running total of 12 months of data.

- A. Pursuant to 40 CFR 60.4206, the Permittee shall operate and maintain stationary CI ICE that achieves the emission standards as required in 60.4205 over the entire life of the engine.
- B. Pursuant to 40 CFR 60.4211(c), the Permittee shall demonstrate compliance with the applicable NSPS emission standards for the affected engines by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The affected

engines must be installed and configured according to the manufacturer's specifications.

Recordkeeping

- C. Pursuant to Section 39.5(b) of the Act, the Permittee shall maintain records of NO<sub>x</sub> + NMHC emissions including supporting calculations in g/kW-hr (g/bhp-hr).
- D. Pursuant to Section 39.5(b) of the Act, the Permittee shall maintain records of NO<sub>x</sub> emissions including supporting calculations in lb/hr and ton/year.

**f. i. Operational and Production Requirements**

- A. Pursuant to 40 CFR 60.4207(b), the Permittee shall comply with the fuel requirements of 40 CFR 80.510(b) (i.e., diesel fuel with a maximum sulfur content of 15 ppm).
- B. Pursuant to 40 CFR 60.4211(f), the Permittee shall operate the engines according to the following:
  - I. The Permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 40 CFR 60.4211(f)(1) through (3), below. In order for the engine to be considered an emergency stationary RICE under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 40 CFR 60.4211(f)(1) through (3), is prohibited. If the Permittee does not operate the engine according to the requirements in 40 CFR 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines, as required by the regulation.
    - 1. There is no time limit on the use of emergency stationary RICE in emergency situations.
    - 2. The Permittee may operate the emergency stationary RICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
      - Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee 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 owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
      - Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other

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authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

- Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
3. Any operation for non-emergency situations as allowed below counts as part of the 100 hours per calendar year allowed:
- Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 60.4211(f)(2). Except as provided in 60.4211(f)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- C. Pursuant to Construction Permit #12100011, the rated electrical output capacity of each of the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall not exceed 1,500 kWe. [T1]
- D. Pursuant to Construction Permit #12100011, the stacks for the "Two Emergency Diesel Generator Engines (Constructed in November 2012)" shall direct the exhaust flow vertically into the atmosphere without obstruction when the engines are operating. [T1]
- ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to 40 CFR 60.4209(a), the Permittee shall operate and maintain a non-resettable hour meter on each engine.
- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall perform an inspection at least once every 2 years to ensure verify compliance with the requirements of Condition 4.4.2(f)(i)(D), above.

Recordkeeping

- C. Pursuant to 40 CFR 60.4214(b), the Permittee shall maintain the following information for each time an engine is operated:
  - I. Date of the operation;
  - II. Time of the operation;
  - III. Duration of the operation; and
  - IV. Purpose of the operation (i.e., exercise or emergency need).
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record demonstrating that the fuel fired in the engines meets the requirements of 40 CFR 80.510(b).

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- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record which demonstrates the designed rated electrical output capacity of the engines (kWe).
- F. I. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record which demonstrates that the design of the exhaust stack(s) from the engines direct exhaust flow vertically into the atmosphere without obstruction when the engines are operating.  
II. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record of the inspections required by Condition 4.4.2(f)(ii)(B), which notes the ability of the exhaust stack(s) from the engines to direct exhaust flow vertically into the atmosphere without obstruction when the engines are operating.

**g. i. Work Practice Requirements**

- A. Pursuant to 60.4211(a), the Permittee shall:
  - I. Operate and maintain the stationary CI internal combustion engines according to the manufacture's emission-related written instructions;
  - II. Change only those emission-related settings that are permitted by the manufacture; and
  - III. Meet the requirements of 40 CFR parts 89, 94, and/or 1068, as applicable.
- B. Pursuant to 60.11(d), at all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions.

**ii. Compliance Method (Work Practice Requirements)**

**Monitoring**

- A. Pursuant to Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform annual inspections of each engine and associated auxiliary equipment.

**Recordkeeping**

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

**3. Non-Applicability Determinations**

- a. This permit is issued based on these engines not being subject to emission limitations of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63 Subpart ZZZZ, based on the following exception: The engines are new stationary engines located at an area source as defined in this NESHAP, 40 CFR 63.6590(a)(2), so that this NESHAP only specifies that the engines must comply with the applicable requirements of the NSPS, 40 CFR 60, Subpart

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IIII, which includes Condition 4.4.2(f)(i)(B). No further requirements under the NESHAP, 40 CFR 63 Subpart ZZZZ, apply for the affected engines as provided by 40 CFR 63.6590(c).

- b. The engines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- c. The engines are not subject to 35 IAC 216.121, because the engines are not fuel combustion units as defined by 35 IAC 211.2470.
- d. The engines are not subject to 35 IAC 217, Subpart Q, Stationary Reciprocating Internal Combustion Engines and Turbines, because the engines are used as emergency or standby as defined by 35 IAC 211.1920.
- e. The engines are not subject to 35 IAC 218.301, because they do not use organic materials in a manner that would subject them to 35 IAC 218.301.
- f. The "Two Emergency Diesel Generator Engines (Constructed in November 2012)" are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

**4. Other Requirements**

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
  - I. Requirements in Conditions 4.4.2(a)(i), 4.4.2(b)(i), 4.4.2(c)(i), 4.4.2(d)(i), 4.4.2(e)(i), 4.4.2(f)(i), and 4.4.2(g)(i).
  - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.

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4.5 Emergency Generator Engines

1. Emission Units and Operations

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Three Emergency Diesel Generator Engines (2000 kW, each)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , VOM, and HAP	January 2006	N/A	None	None
Five Emergency Diesel Generator Engines (2000 kW, each)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , VOM, and HAP	September 1997	N/A	None	None

2. Applicable Requirements

For the emission units in Condition 4.5.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided by 35 IAC 212.123(b).

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each engine in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the engine, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Particulate Matter Requirements (PM)

A. Pursuant to Construction Permit #06010025, PM/PM<sub>10</sub> emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

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<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
5.3	4.2

B. Pursuant to Construction Permit #06010025, PM/PM<sub>10</sub> emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
5.3	2.9

ii. Compliance Method (PM Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

- I. The monthly and annual emissions, ton/mo and ton/yr, of PM from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
- II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

c. i. Sulfur Dioxide Requirements (SO<sub>2</sub>)

A. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

B. Pursuant to Construction Permit #06010025, SO<sub>2</sub> emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
5.3	4.2

C. Pursuant to Construction Permit #06010025, SO<sub>2</sub> emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
5.3	2.9

ii. Compliance Method (SO<sub>2</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- A. The periodic monitoring requirements sufficient to meet 39.5(7)(f) of the Act for Condition 4.5.2(c)(i)(A), above, are addressed by the operational and production requirements in Condition 4.5.2(h), which requires the use of ultra low sulfur diesel fuel only.

Recordkeeping

- B. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:
  - I. The monthly and annual emissions, ton/mo and ton/yr, of SO<sub>2</sub> from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
  - II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

**d. i. Volatile Organic Material Requirements (VOM)**

- A. Pursuant to Construction Permit #06010025, VOM emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
6.3	5.0

- B. Pursuant to Construction Permit #06010025, VOM emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
6.3	3.5

ii. Compliance Method (VOM Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

- A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:
  - I. The monthly and annual emissions, ton/mo and ton/yr, of VOM from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
  - II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

e. i. **Carbon Monoxide Requirements (CO)**

A. Pursuant to Construction Permit #06010025, CO emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
17.5	13.9

B. Pursuant to Construction Permit #06010025, CO emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
17.5	9.6

ii. Compliance Method (CO Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

- I. The monthly and annual emissions, ton/mo and ton/yr, of CO from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
- II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

f. i. **Nitrogen Oxide Requirements (NO<sub>x</sub>)**

A. Pursuant to Construction Permit #06010025, NO<sub>x</sub> emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
81.1	64.5

B. Pursuant to Construction Permit #06010025, SO<sub>2</sub> emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
81.1	44.8

ii. Compliance Method (NO<sub>x</sub> Requirements)

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

- A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:
  - I. The monthly and annual emissions, ton/mo and ton/yr, of NO<sub>x</sub> from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
  - II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

**g. i. Hazardous Air Pollutant Requirements (HAP)**

- A. I. Pursuant to Construction Permit #06010025, Individual HAP emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
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3.2	2.5
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- II. Pursuant to Construction Permit #06010025, Total HAP emissions from the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
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6.3	5.0
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- B. I. Pursuant to Construction Permit #06010025, Individual HAP emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
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3.2	1.7
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- II. Pursuant to Construction Permit #06010025, Total HAP emissions from the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed the following limits: [T1]

<u>(lbs/hr, each)</u>	<u>(tons/yr, total)</u>
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6.3	3.5
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**ii. Compliance Method (HAP Requirements)**

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

Recordkeeping

- A. Pursuant to 39.5(7)(b) of the Act, the Permittee shall maintain the following records:

- I. The monthly and annual emissions, ton/mo and ton/yr, of individual and total HAP from each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", with the supporting calculations.
- II. The hours of operation for each of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" and from each of the "Five Emergency Diesel Generator Engines (Constructed in 1997)", hr/mo.

**h. i. Operational and Production Requirements**

- A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall comply with the fuel requirements of 40 CFR 80.510(b) (i.e., diesel fuel with a maximum sulfur content of 15 ppm).
- B. In order to not be subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, as listed in Condition 4.5.3(a), the Permittee must operate the emergency engines/generators in accordance with the following exception:
  - I. The Permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR Part 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ, and must meet all requirements for non-emergency engines, as required by the regulation.
    1. There is no time limit on the use of emergency stationary RICE in emergency situations.
    2. The Permittee may operate the emergency stationary RICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
      - Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee 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 owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
      - Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has

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declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

- Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

3. Any operation for non-emergency situations as allowed below counts as part of the 100 hours per calendar year allowed:

- Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 63.6640(f)(2). Except as provided in 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

C. Pursuant to Construction Permit #06010025, the operation of the "Three Emergency Diesel Generator Engines (Constructed in 2006)" shall not exceed 1,590 engine-hours per year, total. [T1]

D. Pursuant to Construction Permit #06010025, the operation of the "Five Emergency Diesel Generator Engines (Constructed in 1997)" shall not exceed 1,100 engine-hours per year, total. [T1]

ii. Compliance Method (Operational and Production Requirements)

Compliance with the annual limits shall be determined from a running total of 12 months of data.

Recordkeeping

A. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record demonstrating that the fuel fired in the engines meets the requirements of 40 CFR 80.510(b).

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain the following information for each time an engine is operated:

I. Date of the operation;

II. Time of the operation;

III. Duration of the operation; and

IV. Purpose of the operation (i.e., exercise or emergency need).

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record of the engine-hours operated for each engine (engine-hours/mo and engine-hours/year).

i. Work Practice Requirements

A. Pursuant to Section 39.5(7)(a) of the Act, at all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent

practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions.

ii. Compliance Method (Work Practice Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform annual inspections of each engine and associated auxiliary equipment.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

**3. Non-Applicability Determinations**

- a. i. The "Five Emergency Diesel Generator Engines (Constructed in September 1997)" are not subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart IIII, because the "Five Emergency Diesel Generator Engines (Constructed in September 1997)" have not been constructed, reconstructed, or modified after July 11, 2005.
- ii. The "Three Emergency Diesel Generator Engines (Constructed in January 2006)" are not subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart IIII, because, pursuant to 40 CFR 60.4200(a)(2)(i), the "Three Emergency Diesel Generator Engines (Constructed in January 2006)" were not manufactured after April 1, 2006.
- b. This permit is issued based on "Five Emergency Diesel Generator Engines (Constructed in September 1997)" and the "Three Emergency Diesel Generator Engines (Constructed in January 2006)" not being subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, based on the following exception: Pursuant to 40 CFR 63.6585(f)(3), existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii) are not subject to 40 CFR 63 Subpart ZZZZ. These stationary RICE must meet the definition of an emergency stationary RICE in 40 CFR 63.6675, which includes operating according to the provisions specified in 40 CFR 63.6640(f), as listed in Condition 4.5.2(h)(i)(B), above.
- c. The engines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- d. The engines are not subject to 35 IAC 216.121, because the engines are not fuel combustion units as defined by 35 IAC 211.2470.
- e. The engines are not subject to 35 IAC 217, Subpart Q, Stationary Reciprocating Internal Combustion Engines and Turbines, because the engines are used as emergency or standby as defined by 35 IAC 211.1920.
- f. The engines are not subject to 35 IAC 218.301, because they do not use organic materials in a manner that would subject them to 35 IAC 218.301.

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- g. The "Five Emergency Diesel Generator Engines (Constructed in September 1997)" and the "Three Emergency Diesel Generator Engines (Constructed in January 2006)" are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

#### 5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

##### a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
- I. Requirements in Conditions 4.5.2(a)(i), 4.5.2(b)(i), 4.5.2(c)(i), 4.5.2(d)(i), 4.5.2(e)(i), 4.5.2(f)(i), 4.5.2(g)(i), 4.5.2(h)(i), and 4.5.2(i)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
- A. Date and time of the deviation.
- B. Emission unit(s) and/or operation involved.
- C. The duration of the event.
- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.

4.6 Ethylene Oxide Sterilizers

**1. Emission Units and Operations**

<i>Emission Units</i>	<i>Pollutants Being Regulated</i>	<i>Original Construction Date</i>	<i>Modification/ Reconstruction Date</i>	<i>Air Pollution Control Devices or Measures</i>	<i>Monitoring Devices</i>
Ethylene Oxide Sterilizer - 3M Model 8XL (EBO 475-1)	VOM	1999	N/A	ETO Abator #1	None
Ethylene Oxide Sterilizer - 3M Model 8XL (EBO 475-2)					
Ethylene Oxide Sterilizer - 3M Model 8XL (EBO 475-3)	VOM	1999	N/A	ETO Abator #2	None
Ethylene Oxide Sterilizer - 3M Model 8XL (EBO 475-4)					

**2. Applicable Requirements**

For the emission units in Condition 4.6.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7) (a), 39.5(7) (b), and 39.5(7) (d) of the Act.

**a. i. Volatile Organic Material Requirements (VOM)**

- A. Pursuant to 35 IAC 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit.
- B. Pursuant to Construction Permit #99030064, volatile organic material (VOM) emissions from all such emission units (i.e., Ethylene Oxide Sterilizers EBO 475-1, EBO 475-2, EBO 475-3, and EBO 475-4) shall not exceed nominal emission rates of 0.01 lb/hour and 0.044 ton/yr. [T1]

**ii. Compliance Method (VOM Requirements)**

Compliance with the annual limits shall be determined from a running total of 12 months of data.

Recordkeeping

- A. Pursuant to Construction Permit #99030064 and/or Section 39.5(7) (b) of the Act, the Permittee shall maintain records of the following items for the affected sterilizers:
  - I. The type and amount of sterilant gas used for each sterilizer, lb/batch;
  - II. The number of batches run in each sterilizer, batches/mo and batches/yr; and
  - III. The aggregate monthly and annual VOM emissions from the sterilizers based on the sterilant gas usage and air pollution control equipment efficiencies, with supporting calculations.
  - IV. Hours of operation for each sterilizer, hr/mo and hr/yr.

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b. i. Work Practice Requirements

- A. Pursuant to 40 CFR 63.10390, of Subpart WWWW-National Emission Standards for Hospital Ethylene Oxide Sterilizers, the Permittee must sterilize full loads of items having a common aeration time, except under medically necessary circumstances, as that term is defined in 40 CFR 63.10448.
- B. Pursuant to 40 CFR 63.10440, the Permittee is subject to the General Provisions in Condition 7.4(a).
- C. Pursuant to Construction Permit #99030064, the Permittee shall follow good operating practices for the ethylene oxide abators, including periodic inspection, routine maintenance and prompt repair of defects.

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall maintain the sterilizers, including the abators, according to manufacturer's instructions (e.g., replacing the abator catalyst according to the recommended frequency).

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of the manufacturer maintenance instructions and associated maintenance (e.g., catalyst replacements).
- C. Pursuant to 40 CFR 63.10432 the Permittee must keep the following records:
  - I. The name and address of the Permittee.
  - II. The address (i.e., physical location) of the affected source.
  - III. An identification of the standard and other applicable requirements in this subpart.
  - IV. A brief description of the sterilization facility, including the number of ethylene oxide sterilizers, the size (volume) of each, the number of aeration units, if any, the amount of annual ethylene oxide usage at the facility, the control technique used for each sterilizer, and typical number of sterilization cycles per year.
  - V. A statement that the affected source is an area source.
- D. Pursuant to Construction Permit #99030064 and/or Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the following items for the affected sterilizers:
  - I. Records addressing use of good operating practices for the ethylene oxide abators:
    - 1. Records for periodic inspection of the ethylene oxide abators with date, individual performing the inspection, and nature of inspection; and
    - 2. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

**3. Non-Applicability Determinations**

- a. The ethylene oxide sterilizers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Ethylene Oxide Emissions Standards for Sterilization Facilities, 40 CFR Part 63 Subpart O, because pursuant to 40 CFR 63.630(e), Subpart O does not apply to hospitals, doctors offices, or clinics.
- b. The ethylene oxide sterilizers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the ethylene oxide sterilizers do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

**4. Other Requirements**

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

**a. Prompt Reporting**

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
  - I. Requirements in Conditions 4.6.2(a)(i) and 4.6.2(b)(i).
- B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
  - A. Date and time of the deviation.
  - B. Emission unit(s) and/or operation involved.
  - C. The duration of the event.
  - D. Probable cause of the deviation.
  - E. Corrective actions or preventative measures taken.

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**Section 5 - Additional Title I Requirements**

**1. Construction Permits**

**a. Construction Permit #06010025 [T1]**

i. Emission Units and Operations

<i>Section</i>	<i>Emission Units</i>	<i>Pollutants Being Regulated</i>
4.1	Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.2	Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.1	Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.2	Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP

ii. In addition to the requirements in Section 4 of this permit for the emission units in Condition 5.1(a)(i) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

Applicable Requirements

A. Pursuant to Construction Permit #06010025, total annual emissions (i.e., emissions from natural gas firing and fuel oil firing, combined) from the "new" boilers (i.e., the 24.5 mmBtu/hr boilers constructed in 2006) shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Tons/Yr)</u>
NO <sub>x</sub>	8.9
CO	7.8
VOM	3.4
PM/PM <sub>10</sub>	2.2
SO <sub>2</sub>	4.1
Individual HAP	1.7
Total HAP	3.4

B. Pursuant to Construction Permit #06010025, total annual emissions (i.e., emissions from natural gas firing and fuel oil firing, combined) from the "existing" boilers (i.e., the 25.2 mmBtu/hr boilers constructed in 1997) shall not exceed the following limits: [T1]

<u>Pollutant</u>	<u>(Tons/Yr)</u>
NO <sub>x</sub>	35.2
CO	30.7
VOM	7.1
PM/PM <sub>10</sub>	3.8
SO <sub>2</sub>	6.1
Individual HAP	3.5
Total HAP	7.1

Compliance Method

C. I. Compliance with these limitations shall be determined from a running total of 12 months of data.

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II. The periodic monitoring specified in Section 4.1.2 and Section 4.2.2 is sufficient for the pollutants listed in Condition 5.1(a)(ii)(A).

D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record of the total annual emissions of NO<sub>x</sub>, CO, VOM, PM/PM<sub>10</sub>, SO<sub>2</sub>, Individual HAP, and Total HAP from the "new" and the "existing" boilers.

**b. [T1N]**

i. Emission Units and Operations

Section	Emission Units	Pollutants Being Regulated
4.1	Three Natural Gas-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.2	Three #2 Fuel Oil-Fired Boilers (24.5 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.1	Five Natural Gas-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP
4.2	Five #2 Fuel Oil-Fired Boilers (25.2 mmBtu/hr, each)	PM, SO <sub>2</sub> , VOM, CO, NO <sub>x</sub> , and HAP

ii. In addition to the requirements in Section 4 of this permit for the emission units in Condition 5.1(b)(i) above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

Applicable Requirements

A. NO<sub>x</sub> emissions from each "new" boiler (i.e., each of the 24.5 mmBtu/hr boilers constructed in 2006) and each "existing" boiler (i.e., each of the 25.2 mmBtu/hr boilers constructed in 1997) shall not exceed the following limits: [T1N]

I. 15 tons/year, each; and

II. 5 tons/ozone season (i.e., May 1 through September 30), each.

Compliance Method

B. The monitoring specified in Section 4.1.2 and Section 4.2.2 is sufficient for the pollutants listed in Condition 5.1(b)(ii)(A).

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain a record of the NO<sub>x</sub> emissions from each "new" and each "existing" boiler (tons/year and tons/ozone season), with supporting calculations.

**c. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

i. Prompt Reporting

A. I. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:

Requirements in Conditions 5.1(a)(ii)(A), 5.1(a)(ii)(B), and 5.1(b)(ii)(A).

- II. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- B. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Reports required by Condition 3.5(b).
- C. The deviation reports shall contain at a minimum the following information:
  - I. Date and time of the deviation.
  - II. Emission unit(s) and/or operation involved.
  - III. The duration of the event.
  - IV. Probable cause of the deviation.
  - V. Corrective actions or preventative measures taken.

## Section 6 - Insignificant Activities Requirements

### 1. Insignificant Activities Subject to Specific Regulations

Pursuant to 35 IAC 201.210 and 201.211, the following activities at the source constitute insignificant activities. Pursuant to Sections 9.1(d) and 39.5(6)(a) of the Act, the insignificant activities are subject to specific standards promulgated pursuant to Sections 111, 112, 165, or 173 of the Clean Air Act. The Permittee shall comply with the following applicable requirements:

<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Gas turbines and stationary reciprocating internal combustion engines < 112 kW (150 HP).	1	35 IAC 201.210(a)(15)
Gas Turbines and Engines between 112 KW and 1,118 KW (150 and 1,500 HP) that are emergency or standby units.	7	35 IAC 201.210(a)(16)

#### a. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements in addition to the applicable requirements in Condition 6.4:

##### i. **New Source Performance Standard Requirements (NSPS)**

###### A. Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII)

- I. Pursuant to 40 CFR 60.4205(b) and 60.4202(a)(2), the engines are subject to the emission limitations of 40 CFR 89.112 and 89.113.
- II. The engines shall meet the applicable general provisions of 40 CFR 60 Subpart A. See Condition 7.2(b).
- III. The engines shall comply with the applicable emission limitations and operating limitations, fuel requirements, general compliance requirements, testing and initial compliance requirements, continuous compliance requirements, notifications, reports, and records and other requirements and information of 40 CFR 60 Subpart IIII and 40 CFR 89 Subpart B.

##### ii. **National Emission Standards for Hazardous Air Pollutants (NESHAP)**

###### A. Standards of Performance for Stationary Reciprocating Internal Combustion Engines (40 CFR 60 Subpart ZZZZ)

- I. Pursuant to 40 CFR 63.6590(a)(1)(iii) and 40 CFR 63.6590(b)(3)(viii), the existing engines do not have to meet the requirements of subpart ZZZZ and of subpart A including initial notification requirements.
- II. Pursuant to 40 CFR 63.6590(a)(1)(iii) and 40 CFR 60.6590(c), new engines must meet the requirements of ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines.

### 2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

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<i>Insignificant Activity</i>	<i>Number of Units</i>	<i>Insignificant Activity Category</i>
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a)(4).	7	35 IAC 201.210(a)(4)
Furnaces melting metals other than Beryllium with a brim full capacity < 450 cubic inches.	1	35 IAC 201.210(a)(6)
Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oil.	21	35 IAC 201.210(a)(11)
Any size storage tanks containing exclusively soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions where an organic solvent has not been mixed.	1	35 IAC 201.210(a)(17)

**3. Insignificant Activities in 35 IAC 201.210(b)**

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

**4. Applicable Requirements**

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

- a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.
- c. Pursuant to 35 IAC 218.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.
- d. Pursuant to 35 IAC 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 218.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

**5. Compliance Method**

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

- a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

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- b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

**6. Notification Requirements for Insignificant Activities**

The source shall notify the IEPA accordingly to the addition of insignificant activities:

**a. Notification 7 Days in Advance**

- i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):
  - A. A description of the emission unit including the function and expected operating schedule of the unit.
  - B. A description of any air pollution control equipment or control measures associated with the emission unit.
  - C. The emissions of regulated air pollutants in lb/hr and ton/yr.
  - D. The means by which emissions were determined or estimated.
  - E. The estimated number of such emission units at the source.
  - F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.
- ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.
- iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

**b. Notification Required at Renewal**

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

**c. Notification Not Required**

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as describe in Condition 6.3, a notification is not required.

## Section 7 - Other Requirements

### 1. Testing

- a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:
  - i. The name and identification of the emission unit(s) being tested.
  - ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.
  - iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
  - v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
  - vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.
  - vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
  - viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
  - ix. Sampling of materials, QA/QC procedures, inspections, etc.
- b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:
  - i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.
  - ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.
- c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but

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no later than ninety (90) days after completion of the test, unless it is required otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) an alternative date is agreed upon in advance pursuant to Section 39.5(7)(a) of the Act. The Final Report shall include as a minimum:

- i. General information including emission unit(s) tested.
  - ii. A summary of results.
  - iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).
  - iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
  - v. Detailed description of test conditions, including:
    - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.
    - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
    - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
  - vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
  - vii. An explanation of any discrepancies among individual tests or anomalous data.
  - viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.
  - ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.
  - x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.
- d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

**2. Emissions Reduction Market System (ERMS) Requirements**

- a. Pursuant to 35 IAC Part 205, ERMS seasonal emissions of VOM during the seasonal allotment period from May 1 through September 30 shall not exceed 10 tons/year.
- b. Pursuant to 35 IAC 205, the Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 3 and 4 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period.
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 3 and 4 of this permit.
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- c. Pursuant to 35 IAC Section 205.150(c), in the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

**3. 40 CFR 60 Subpart A Requirements (NSPS)**

**a. 40 CFR 60 Subpart A and IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

Pursuant to 40 CFR 60 Subpart A and IIII, the Permittee shall comply with the following applicable General Provisions as indicated:

<i>General Provision Citation</i>	<i>General Provision Applicable?</i>	<i>Subject of Citation</i>	<i>Explanation (if required)</i>
40 CFR 60.1	Yes	General Applicability of the General Provisions	
40 CFR 60.2	Yes	Definitions	Additional terms defined in 40 CFR 60.4219.
40 CFR 60.3	Yes	Units and Abbreviations	
40 CFR 60.4	Yes	Address	
40 CFR 60.5	Yes	Determination of Construction or Modification	
40 CFR 60.6	Yes	Review of Plans	
40 CFR 60.7	Yes	Notification and Recordkeeping	Except that 40 CFR 60.7 only applies as specified in 40 CFR 60.4214(a).
40 CFR 60.8	Yes	Performance Tests	Except that 40 CFR 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified. Note: The engines at this source are not subject to 40 CFR 60.8.
40 CFR 60.9	Yes	Availability of Information	
40 CFR 60.10	Yes	State Authority	
40 CFR 60.11	No	Compliance with Standards and Maintenance Requirements	Requirements are specified in subpart IIII.
40 CFR 60.12	Yes	Circumvention	
40 CFR 60.13	Yes	Monitoring Requirements	Except that 40 CFR 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder). Note: The engines at this source are not subject to 40 CFR 60.13.
40 CFR 60.14	Yes	Modification	
40 CFR 60.15	Yes	Reconstruction	
40 CFR 60.16	Yes	Priority List	
40 CFR 60.17	Yes	Incorporations by Reference	
40 CFR 60.18	No	General Control Device Requirements and Work Practice Requirements	
40 CFR 60.19	Yes	General Notification and Reporting Requirements	

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**4. 40 CFR 63 Subpart A Requirements (NESHAP)**

**a. 40 CFR 63 Subpart A and WWWW - National Emission Standards for Hospital Ethylene Oxide Sterilizers**

Pursuant to 40 CFR 63 Subpart A and WWWW, the Permittee shall comply with the following applicable General Provisions as indicated:

<i>General Provision Citation</i>	<i>General Provision Applicable?</i>	<i>Subject of Citation</i>	<i>Explanation (if required)</i>
40 CFR 63.1(a)(1)-(4), (6), (10)-(12), (b)(1), (3)	Yes	General Applicability of the General Provisions	
40 CFR 63.1(a)(5), (7)-(9)	[RESERVED]	General Applicability of the General Provisions	
40 CFR 63.1(b)(2)	[RESERVED]	General Applicability of the General Provisions	
40 CFR 63.1(c)(1)-(2)	Yes	General Applicability of the General Provisions	
40 CFR 63.1(c)(3)-(4)	[RESERVED]	General Applicability of the General Provisions	
40 CFR 63.1(c)(5)	No	General Applicability of the General Provisions	
40 CFR 63.1(d)	[RESERVED]	General Applicability of the General Provisions	
40 CFR 63.1(e)	Yes	General Applicability of the General Provisions	
40 CFR 63.2	Yes	Definitions	
40 CFR 63.3	Yes	Units and Abbreviations	
40 CFR 63.4	Yes	Prohibited Activities and Circumvention	
40 CFR 63.5	No	Preconstruction Review and Notification Requirements	
40 CFR 63.6(a), (b)(1)-(5), (7)	Yes	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(b)(6)	[Reserved]	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(c)(1)	Yes	Compliance with Standards and Maintenance Requirements	Subpart WWWW requires compliance 1 year after the effective date.
40 CFR 63.6(c)(2), (5)	No	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(c)(3)-(4)	[Reserved]	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(d)	[Reserved]	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(e)-(h)	No	Compliance with Standards and Maintenance Requirements	
40 CFR 63.6(i)-(j)	Yes	Compliance with Standards and Maintenance Requirements	
40 CFR 63.7	No	Performance Testing Requirements	
40 CFR 63.8	No	Monitoring Requirements	

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**Section 7 - Other Requirements**  
**7.4 - 40 CFR 63 Subpart A**  
**Requirements (NESHAP)**

<i>General Provision Citation</i>	<i>General Provision Applicable?</i>	<i>Subject of Citation</i>	<i>Explanation (if required)</i>
40 CFR 63.9(a)	Yes	Notification Requirements	
40 CFR 63.9(b)	No	Notification Requirements	
40 CFR 63.9(c)	Yes	Notification Requirements	
40 CFR 63.9(d)-(j)	No	Notification Requirements	
40 CFR 63.10(a)(1)-(2)	Yes	Recordkeeping and Reporting Requirements	
40 CFR 63.10(a)(3)-(4)	Yes	Recordkeeping and Reporting Requirements	
40 CFR 63.10(a)(5)-(7)	No	Recordkeeping and Reporting Requirements	
40 CFR 63.10(b)(1)	Yes	Recordkeeping and Reporting Requirements	
40 CFR 63.10(b)(2)-(f)	No	Recordkeeping and Reporting Requirements	
40 CFR 63.11	No	Control Device and Work Practice Requirements	
40 CFR 63.12	Yes	State Authority and Delegations	
40 CFR 63.13	Yes	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	
40 CFR 63.14	Yes	Incorporations by Reference	
40 CFR 63.15	Yes	Availability of Information and Confidentiality	
40 CFR 63.16	Yes	Performance Track Provisions	

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**Section 8 - State Only Requirements**

**1. Permitted Emissions for Fees**

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

<i>Pollutant</i>		<i>Tons/Year</i>
Volatile Organic Material	(VOM)	23.09
Sulfur Dioxide	(SO <sub>2</sub> )	18.08
Particulate Matter	(PM)	18.26
Nitrogen Oxides	(NO <sub>x</sub> )	163.82
HAP, not included in VOM or PM	(HAP)	----
Total		223.24

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## Attachment 1 - List of Emission Units at This Source

<i>Section</i>	<i>Emission Units</i>	<i>Description</i>
4.1	Boilers: Natural Gas-Firing Mode (Subject to NSPS Dc)	The five boilers constructed in 1997 and the three boilers constructed in 2006 are subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units. These units are capable of firing natural gas or fuel oil, separately. The applicable regulations for the separate modes of operation are addressed in separate sections of the permit, Section 4.1 and Section 4.2, natural gas mode and fuel oil mode, respectively. These boilers are used to supply steam, heat and/or power for the needs of this source.
4.2	Boilers: Fuel Oil Firing Mode (Subject to NSPS Dc)	
4.3	Natural Gas-Fired Boilers	These five small boilers are fired using natural gas. They are used to supply steam, heat and/or power for the needs of this source.
4.4	Emergency Generator Engines (Subject to NSPS IIII)	The two diesel fired RICE in this section are subject to the NSPS for Compression Ignition RICE. These engines are used for backup purposes (e.g., power supply outages) only.
4.5	Emergency Generator Engines	The eight diesel fired RICE in this section are used for backup purposes (e.g., power supply outages) only.
4.6	Ethylene Oxide Sterilizers	Four ethylene oxide (ETO) sterilizers are typical sterilizers which are standard in local hospitals and use ethylene oxide to accomplish the sterilization of medical devices and other materials for use in operating rooms and patient care. Materials and devices are placed in the sterilization chamber, the chamber is closed, and ethylene oxide gas is introduced. After a specified time, the chamber is purged of residual ethylene oxide to an abator. An abator is a device through which ambient air is pulled through an electric heater. The heated air then passes through a catalytic cell inlet where the residual ethylene oxide is fed into the air stream through a solenoid valve and an injection manifold. As the ethylene oxide enters the heated air stream it is diluted with air before it enters the catalytic cell where the ethylene oxide is catalytically oxidized to carbon dioxide and water.

## Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute
ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment trading unit
BACT	Best Available Control Technology
BAT	Best Available Technology
Btu	British Thermal Units
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CISWI	Commercial Industrial Solid Waste Incinerator
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
ERMS	Emissions Reduction Market System
°F	Degrees Fahrenheit
GHG	Green house gas
GACT	Generally Acceptable Control Technology
gr	Grains
HAP	Hazardous air pollutant
Hg	Mercury
HMIWI	Hospital medical infectious waste incinerator
hp	Horsepower
hr	Hour
H <sub>2</sub> S	Hydrogen sulfide
I.D. No.	Identification number of source, assigned by IEPA
IAC	Illinois Administrative Code
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
kw	Kilowatts
LAER	Lowest Achievable Emission Rate
lbs	Pound

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m	Meter
MACT	Maximum Achievable Control Technology
M	Thousand
MM	Million
mos	Month
MSDS	Material Safety Data Sheet
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PB	Lead
PEMS	Predictive Emissions Monitoring System
PM	Particulate matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration
PSEU	Pollutant-Specific Emission Unit
psia	Pounds per square inch absolute
PTE	Potential to emit
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
scf	Standard cubic feet
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile organic material

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Attachment 3 - Contact and Reporting Addresses

<p style="text-align: center;">IEPA Compliance Section</p> <p style="text-align: center;">IEPA Stack Test Specialist</p> <p style="text-align: center;">IEPA Air Quality Planning Section</p> <p style="text-align: center;">IEPA Air Regional Field Operations Regional Office #1</p> <p style="text-align: center;">IEPA Permit Section</p>	<p>Illinois EPA, Bureau of Air Compliance &amp; Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p>
	<p>Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016</p> <p>Phone No.: 847/294-4000</p>
	<p>Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276</p> <p>Phone No.: 217/782-2113</p>
	<p>Illinois EPA, Bureau of Air Regional Office #1 9511 Harrison Street Des Plaines, IL 60016</p> <p>Phone No.: 847/294-4000</p>
	<p>Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506</p> <p>Phone No.: 217/785-1705</p>
<p style="text-align: center;">USEPA Region 5 - Air Branch</p>	<p>USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604</p> <p>Phone No.: 312/353-2000</p>

**Attachment 4 - Example Certification by a Responsible Official**

<b>SIGNATURE BLOCK</b>	
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.	
I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))	
AUTHORIZED SIGNATURE:	
BY: _____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

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