

Attention:

University of Chicago  
Attn: Adam D'Ambrosio  
5235 S. Harper Ct.  
Chicago, IL 60615

State of Illinois

# CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

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[Title V Permit]

Source:

University of Chicago  
5235 South Harper Court  
Chicago, IL 60615

I.D. No.: 031600FLT  
Permit No.: 95080059

Permitting Authority:

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





# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

## CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Type of Application: Significant Modification (SM)  
Purpose of Application: Revise Existing CAAPP Permit

ID No.: 031600FLT  
Permit No.: 95080059  
Statement of Basis No.: 95080059-1909

Date Application Received: April 27, 2018  
Date Issued: November 13, 2018  
Permit Effective Date<sup>1</sup>: January 28, 2019

Date Revision Received: July 12, 2019  
Date Revision Issued: December 4, 2019

Expiration Date: January 28, 2024  
Renewal Submittal Date: 9 Months Prior to January 28, 2024

Source Name: University of Chicago  
Address: 5235 South Harper Court  
City: Chicago  
County: Cook  
ZIP Code: 60615

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. If a conflict exists between this document and previous versions of the CAAPP permit, this document supersedes those terms and conditions of the permit for which the conflict exists. The previous permit issued November 13, 2018 is incorporated herein by reference. 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 / wdm*

Raymond E. Pilapil  
Manager, Permit Section  
Bureau of Air

REP:WDM:JTC:tan

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

1 The permit renewal was issued prior to the expiration date of the existing CAAPP permit that was currently in effect at that time for the source. Terms and conditions of each CAAPP permit remain in effect for the full five-year term of the permit. For this reason, the renewed permit became effective on the first day following the expiration date of the existing permit, as denoted above, unless that permitting action was appealed and subsequently stayed by the Pollution Control Board.





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## Section 1 - Source Information

**1. Addresses**Source

University of Chicago  
5235 South Harper Court  
Chicago, IL 60615

Owner

University of Chicago  
5235 South Harper Court  
Chicago, IL 60615

Operator

University of Chicago  
5235 South Harper Court  
Chicago, IL 60615

Permittee

The Owner or 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>	John L. D'Angelo	Assistant Vice President, Facilities Services
<i>Delegated Authority</i>	Adam D'Ambrosio	Director

Other Contacts

	<i>Name</i>	<i>Phone No.</i>	<i>Email</i>
<i>Source Contact</i>	Adam D'Ambrosio	773-834-3029	adamdambrosio@uchicago.edu
<i>Technical Contact</i>	Heather Sims	773-702-5663	hgriffin@uchicago.edu
<i>Correspondence</i>	Adam D'Ambrosio	773-834-3029	adamdambrosio@uchicago.edu
<i>Billing</i>	Ariela Porter	773-834-5907	aporter@uchicago.edu

**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. Fee payment shall be made either electronically at <https://magic.collectorsolutions.com/magic-ui/Login/illinois-epa> or by check or money order payable to "Illinois Environmental Protection Agency" and sent to: Fiscal Services #2, 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.
- 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 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

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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 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

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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 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 the IEPA Compliance Section. Address is 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 August 20, 2018 (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.

- 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.

**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)(l) and (o) of the Act]

- 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. Start-Up, 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. 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.

#### c. 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(c)(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).

**d. 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 with 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**

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 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). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any 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.

**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 June 14, 2018, 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), and 3.1(d).
  - 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).

**b. Semiannual Reporting**

- i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit a Semi-Annual Monitoring Report to the Illinois EPA, Air Compliance Section, summarizing required monitoring and identifying all instances of deviation from the permit, every six months as follows, unless more frequent reporting is required elsewhere in 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).

Note: Required monitoring includes all applicable monitoring, testing, recordkeeping, and reporting requirements. This may include monitoring requirements not addressed within the Compliance Method Sections of this Permit.

**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 (South Steam Plant)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Boiler-1 (195.5 mmBtu/hr, Natural gas fired)	CO, NO <sub>x</sub> , HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS
Boiler-2 (195.5 mmBtu/hr, Natural gas fired)	CO, NO <sub>x</sub> , HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS
Boiler-3 (195.5 mmBtu/hr, Natural gas fired)	CO, NO <sub>x</sub> , HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS
Boiler-4 (195.5 mmBtu/hr, Natural gas fired)	CO, NO <sub>x</sub> , HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS

#### 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) - (f) of the Act.

##### a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), except as provided by 35 IAC 212.123(b), 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.

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

###### Monitoring Requirements

- A. Pursuant to Sections 39.5(7) (b) and (d) of the Act, at a minimum, the Permittee shall perform observations for visible emissions in accordance with Method 22 for visible emissions at least once every calendar quarter. 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 and/or maintenance and repair. 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 Requirements

- B. Pursuant to Section 39.5(7) (b) and (d) of the Act, the Permittee shall keep records for each observation for visual emissions 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) and (d) of the Act, the Permittee shall keep records for all Method 9 opacity measurements made in accordance with Condition 4.1.2(a)(ii)(A) above.

b. 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.

ii. Compliance Method (CO Requirements)

- A. Sufficient periodic monitoring requirements to meet 39.5(7)(f) of the Act are addressed by the operational and production requirements in Condition 4.1.2(e) and the work practice requirements in 4.1.2(f).

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

- A. Pursuant to 35 IAC 217.164, no person shall cause or allow emissions of NO<sub>x</sub> into the atmosphere from any industrial boiler to exceed .08 lbs/mmBtu using natural gas. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

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

Monitoring

- A. Pursuant to 39.5(7)(b) and (d) of the Act, the monitoring requirements sufficient to meet 39.5(7)(f) of the Act are the work practice requirements in 4.1.2(f).

Recordkeeping

- B. Pursuant to Construction Permit #14010002, the following records shall be kept for each boiler:

- I. The average hourly NO<sub>x</sub> emission data as determined by the PEMS.
- II. The ozone season (May 1<sup>st</sup> through September 30<sup>th</sup>) and annual NO<sub>x</sub> emissions (pounds).
- III. The ozone season average and annual average NO<sub>x</sub> emission rates (lbs/mmBtu heat input), calculated within 30 days of the end of the averaging periods (i.e., calculated by October 30 for ozone season averaging period and by January 30 of the following year for annual averaging period).

d. i. Hazardous Air Pollutant Requirements (HAP)

- A. Pursuant to Construction Permit #06080015, emissions of individual HAPs (i.e. formaldehyde and hexane), shall not exceed 0.0018 lb/mmBtu from each boiler and 5.6 tons/year total from the four boilers. [T1]

ii. Compliance Method (Construction Permit Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of formaldehyde, hexane and total HAP emissions from the boilers including supporting documentation and calculations using (pounds/mmBtu), (tons/month), and (tons/year).

e. i. Operational and Production Requirements

- A. Pursuant to Section 39.5(7)(a) of the Act, when natural gas is combusted, pipeline quality natural gas shall be used.
- B. Pursuant to Construction Permit #06080015, total fuel usage of the four boilers #1 - 4 shall not exceed 6,200 million scf of natural gas per year.

ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to Section 39.5(7)(b), the Permittee shall maintain records of the type of fuel fired in the boiler.
- C. Pursuant to 39.5(7)(b) and (c) of the Act, the Permittee shall maintain records of natural gas usage in scf/month and scf/year including supporting documentation and calculations.

f. i. Work Practice Requirements

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

ii. Compliance Method (Work Practice Requirements)

Monitoring Requirements

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boiler and associated auxiliary equipment.
- B. Pursuant to Section 39.5(7)(a) and (d), the Permittee shall comply with the following inspection and tune-up requirements for the boilers. Inspections/tune-ups shall be conducted annually:
- I. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, but each burner shall be inspected at least once every 36 months).
- II. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- III. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

- IV. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- V. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

Recordkeeping Requirements

- C. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of each monthly inspection and annual inspection/tune-up 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) and (d) of the Act, the Permittee shall keep records onsite of annual tune-ups containing the following information:
  - I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
  - II. The type and amount of fuel used over the 12 months prior to the annual tune-up of the boiler.

**3. Non-Applicability Determinations**

- a. The boilers are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60 Subpart Db, because the boilers were constructed prior to June 19, 1984.
- b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial-Commercial-Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are gas-fired as defined by 40 CFR 63.11237 and, therefore, not subject pursuant to 40 CFR 63.11195(e).
- c. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the boilers are located at an area source of hazardous air pollutants.
- d. The boilers are not subject to 35 IAC 212, Subpart E, because the boilers only burn natural gas in this operating scenario.
- e. The boilers are not subject to 35 IAC 214.141 because the boiler fires natural gas in this operating scenario.
- f. The boilers are not subject to 35 IAC 217.141 because the heat input of the boiler is less than 250 mmBtu/hr.
- g. The boilers are not subject to 35 IAC 218.301 and 35 IAC 218.302, Subpart G, pursuant to 35 IAC 218.303, because the units are fuel combustion emission units.

- h. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boiler Low NOx burners are passive control devices not used 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 4.1.2(a)(i), 4.1.2(b)(i), 4.1.2(c)(i), 4.1.2(d)(i), 4.1.2(e)(i), and 4.1.2(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.

## Section 4 - Emission Unit Requirements

### 4.2 Boilers (South Steam Plant, Back Up Operation)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Boiler-1 (195.5 mmBtu/hr, Distillate oil)	PM, SO <sub>2</sub> , CO, HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS
Boiler-2 (195.5 mmBtu/hr, Distillate oil)	PM, SO <sub>2</sub> , CO, HAP	June 1970	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> PEMS

#### 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) - (f) of the Act.

##### a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), except as provided by 35 IAC 212.123(b), 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.

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

###### Monitoring Requirements

- A. Pursuant to Sections 39.5(7) (b) and (d) of the Act, at a minimum, the Permittee shall perform observations for visual emissions in accordance with Method 22 for visible emissions each time the boilers are heating the source on distillate oil. The observations shall be for 30 minutes. 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 and/or maintenance and repair. 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 Requirements

- B. Pursuant to Section 39.5(7) (b) and (e) of the Act, the Permittee shall keep records for each observation for visual emissions 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) and (e) of the Act, the Permittee shall keep records for all Method 9 opacity measurements in accordance with Condition 4.2.2(a) (ii) (A).

b. i. Particulate Matter Requirements (PM)

- A. Pursuant to 35 IAC 212.206, the emissions of particulate matter (PM) into the atmosphere in any one-hour period shall not exceed 0.15 kg/MW-hr (0.10 lb/mmBtu) of actual heat input from any fuel combustion emission unit using liquid fuel exclusively.

ii. Compliance Method (PM Requirements)

Testing

- A. Pursuant to Section 39.5(7)(b) and (c) of the Act, the boilers shall be tested by Reference Method 5 upon operation of 48 hours in this mode in a calendar year. Testing shall occur within 90 days after the 48 hours per calendar year threshold has been exceeded.
- B. Pursuant to Section 39.5(7)(b) and (c), the Permittee shall also comply with the requirements in Section 7.1.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM emissions from the boilers when fired with distillate oil including supporting calculations (pounds/mmBtu).

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

- A. Pursuant to 35 IAC 214.161(b)(2), the owner or operator of a fuel combustion emission source, burning liquid fuel exclusively, will use a distillate fuel oil that has a sulfur content that does not exceed 15 ppm.

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

Recordkeeping

- A. Pursuant to 35 IAC 214.161(b)(3), the owner or operator must maintain records demonstrating that the fuel oil meets the required standard for sulfur content. The records must be kept for 5 years and provided to the agency within 30 days upon the receipt of a request by the Agency.

d. 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.

ii. Compliance Method (CO Requirements)

- A. Sufficient periodic monitoring requirements are addressed by the work practice requirements in 4.2.2(g).

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

- A. Pursuant to 35 IAC 217.164, no person shall cause or allow emissions of NO<sub>x</sub> into the atmosphere from any industrial boiler to exceed .10 lbs/mmBtu using distillate fuel oil. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

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

Monitoring

- A. Pursuant to 39.5(7)(b) and (c) of the Act, the Permittee shall comply with all the requirements of Section 7.1.

Recordkeeping

- B. Pursuant to Construction Permit #14010002, the following records shall be kept for each boiler:
- I. The average hourly NO<sub>x</sub> emission data as determined by the CEMS or PEMS.
  - II. The ozone season (May 1<sup>st</sup> through September 30<sup>th</sup>) and annual NO<sub>x</sub> emissions (pounds).
  - III. The ozone season average and annual average NO<sub>x</sub> emission rates (lbs/mmBtu heat input), calculated within 30 days of the end of the averaging periods (i.e., calculated by October 30 for ozone season averaging period and by January 30 of the following year for annual averaging period).

f. i. Hazardous Air Pollutant Requirements (HAP)

- A. Pursuant to Construction Permit #06080015, emissions of formaldehyde shall not exceed 0.0018 lb/mmBtu from each boiler and 5.6 tons/year total from the four boilers. [T1]

ii. Compliance Method (Construction Permit Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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).

Record Keeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of formaldehyde, hexane and total HAP emissions from the boilers including supporting calculations using (pounds/mmBtu), (tons/month), and (tons/year).

g. i. Operational and Production Requirements

- A. Pursuant to 40 CFR 63.11237, of NESHAP Subpart JJJJJJ, each boiler is allowed to operate on liquid fuel up to 48 hours for periodic testing, periods of gas curtailment and gas supply interruptions, during a calendar year.
- B. Pursuant to Construction Permit #06080015, distillate oil use from the four boilers shall not exceed 2.5 million gallons per year.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

Section 4 - Emission Unit Requirements  
4.2 - Boilers (South Steam Plant, Back Up Operation)

- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the reason for distillate oil use and hours of operation when fired with distillate fuel oil (hours/month and hours/year).
- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the amount of distillate fuel used in gallons/month and gallons/year.

**h. 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 Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boilers and associated auxiliary equipment.

**Recordkeeping**

- B. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall keep records of each monthly 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. The boilers are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60 Subpart Db, because the boilers were constructed prior to June 19, 1984.
- b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are gas-boilers as defined in 40 CFR 63.11237.
- c. The boilers are not subject to 35 IAC 218.301 and 35 IAC 218.302, Subpart G, pursuant to 35 IAC 218.303, because the units are fuel combustion emission units.
- d. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, SO<sub>2</sub>, VOM, CO, NO<sub>x</sub>, and HAPs, 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.

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Permit No.: 95080059

Date Received: 04/27/2018  
Date Issued: 11/13/2018  
Date Revised: 12/4/2019



**5. Reporting Requirements**

The Permittee shall submit the following information pursuant to Section 39.5(7)(b) and (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), and 4.2.2(h)(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.

## Section 4 - Emission Unit Requirements

### 4.3 Boilers (West Campus Central Utility Plant, NSPS Db)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Boiler-1 (300 mmBtu/hr, Natural gas fired)	PM/PM <sub>10</sub> , CO, SO <sub>2</sub> , NO <sub>x</sub> , HAP	December 2007	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> CEMS
Boiler-2 (300 mmBtu/hr, Natural gas fired)	PM/PM <sub>10</sub> , CO, SO <sub>2</sub> , NO <sub>x</sub> , HAP	December 2007	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> CEMS

#### 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 212.122(a), except as provided by 35 IAC 212.122(b), no person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emission unit for which construction or modification commenced on or after April 14, 1972, with actual heat input greater than 73.2 MW (250 mmBtu/hr), having an opacity greater than 20 percent.
- B. Pursuant to Sections 39.5(7)(a) of the Act, 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).

##### 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 in accordance with Method 22 for visible emissions at least once every calendar quarter. 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 and/or maintenance and repair. 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 using Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

###### Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records for each observation for visual emissions 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 Method 9 opacity measurements performed in accordance with Condition 4.3.2(a)(ii)(A) above.

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b. i. Particulate Matter Requirements (PM)

- A. Pursuant to Construction Permit #06080015, emissions of PM/PM<sub>10</sub>, from each boiler shall not exceed 0.007 lb/mmBtu and 2.2 lb/hr. [T1]
- B. Pursuant to Construction Permit #06080015, emissions of PM/PM<sub>10</sub>, from both boilers shall not exceed 8.0 ton/year. [T1]

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.

c. Carbon Monoxide (CO) Requirements

- 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. Pursuant to Construction Permit #06080015, emissions of CO from each boiler shall not exceed 0.1 lb/mmBtu and 30 lb/hr. [T1]
- C. Pursuant to Construction Permit #06080015, emissions of CO from both boilers shall not exceed 75 ton/year. [T1]

ii. Compliance Method (CO and VOM Requirements)

Monitoring

- A. Sufficient periodic monitoring to meet 39.5(7)(f) of the Act are addressed by the operational and production requirements in Condition 4.3.2(f) and the work practice requirements in 4.3.2(g).
- B. Pursuant to Sections 39.5(7)(a) of the Act, 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).

Record Keeping

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the above emissions from the boilers including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.

d. i. Volatile Organic Material (VOM) Requirements

- A. Pursuant to Construction Permit #06080015, emissions of VOM from each boiler shall not exceed 1.6 lb/hr. [T1]
- B. Pursuant to Construction Permit #06080015, emissions of VOM from both boilers shall not exceed 6.0 ton/year. [T1]

Compliance Method (VOM Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of VOM emissions including lbs/hr, tons/month, and tons/year.

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

- A. Pursuant to 40 CFR 60.44b(1)(1) gases containing NO<sub>x</sub> shall not exceed 86 ng/J (0.20 lb/mmBtu) heat input if the facility combusts natural gas.
- B. Pursuant to Construction Permit #06080015, emissions of NO<sub>x</sub> from each boiler shall not exceed 10.5 lb/hr. [T1]
- C. Pursuant to Construction Permit #06080015, emissions of NO<sub>x</sub> from both boilers shall not exceed 25 ton/year. [T1]
- D. Pursuant to Sections 39.5(7)(a) of the Act, 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).
- E. Pursuant to 35 IAC 217.164, no person shall cause or allow emissions of NO<sub>x</sub> into the atmosphere from any industrial boiler to exceed .08 lbs/mmBtu using natural gas. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

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

Monitoring

- A. Pursuant to 40 CFR 60.44b(i), compliance with the emission limits in 40 CFR 60.44b(1)(1) is determined on a 30-day rolling average basis.
- B. Pursuant to 40 CFR 60.46b(c), (e) and 40 CFR 60.48b(b)(1), the Permittee shall calibrate, maintain and operate CEMS for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>).
- C. Pursuant to 40 CFR 60.48b(e), the Permittee shall evaluate and operate the continuous emissions monitoring system according to the procedures of 40 CFR 60.13.
- D. Pursuant to 40 CFR 60.48b(f), when NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7A or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- E. Pursuant to Construction Permit #06080015, in addition to determining compliance with the NO<sub>x</sub> standard of the NSPS, the CEMS shall also be used to address compliance with the NO<sub>x</sub> emission limitations in Condition 4.3.2(c)(i)(B) and (C). [T1]

- F. Pursuant to 39.5(7)(b) and (d) of the Act, the monitoring requirements sufficient to meet 39.5(7)(f) of the Act are the work practice requirements in 4.1.2(f).

Recordkeeping

- G. Pursuant to 40 CFR 60.48b(b)(1) and (c), the Permittee shall record the output of the CEMS during all periods of operation except during CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- H. Pursuant to 40 CFR 60.48b(d), the Permittee shall measure the 1-hour average NO<sub>x</sub> emission rates from the CEMS in ng/J or lb/mmBtu heat input and use this to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).
- I. Pursuant to 40 CFR 60.48b(e)(2), the span value for NO<sub>x</sub> is determined using one of the procedures in 40 CFR 60.48b(e)(2)(i) or (ii).
- J. Pursuant to 40 CFR 60.49b(g), the Permittee shall maintain records of the following information for each steam generating unit operating day:
- I. Calendar date;
  - II. The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/mmBtu heat input) measured or predicted;
  - III. The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/mmBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
  - IV. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - V. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - VI. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - VII. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - VIII. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - IX. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - X. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this part.

Section 4 - Emission Unit Requirements  
4.3 - Boilers (West Campus Central Utility Plant, NSPS Db)

- K. Pursuant to Section 39.5(7)(b) and (d) of the Act, the Permittee shall maintain records of the above emissions from the boilers including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.
- L. Pursuant to Section 39.5(b) and (d), the following records shall be kept for each boiler:
  - I. The average hourly NO<sub>x</sub> emission data as determined by the CEMS or PEMS.
  - II. The ozone season (May 1<sup>st</sup> through September 30th) and annual NO<sub>x</sub> emissions (pounds).
  - III. The ozone season average and annual average NO<sub>x</sub> emission rates (lbs/mmBtu heat input), calculated within 30 days of the end of the averaging periods (i.e., calculated by October 30 for ozone season averaging period and by January 30 of the following year for annual averaging period).

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

- A. Pursuant to Construction Permit #06080015, emissions of formaldehyde from each boiler shall not exceed 0.0018 lb/mmBtu. [T1]
- B. Pursuant to Construction Permit #06080015, emissions of formaldehyde from both boilers shall not exceed 2.0 ton/year. [T1]
- C. Pursuant to Construction Permit #06080015, emissions of hexane from each boiler shall not exceed 0.0018 lb/mmBtu. [T1]
- D. Pursuant to Construction Permit #06080015, emissions of hexane from both boilers shall not exceed 2.0 ton/year. [T1]

ii. **Compliance Method (HAP)**

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

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

g. i. **Operational and Production Requirements**

- A. Pursuant to Construction Permit #06080015, pipeline quality natural gas shall be the only fuels fired in the boilers: [T1]
  - I. The heat input to the boilers shall not exceed 446,400 million Btu/month and 1,502,000 million Btu/year. [T1]
  - II. The fuel usage by the boilers shall not exceed the natural gas usage of 1,360 million scf per year. [T1]
- B. Pursuant to Sections 39.5(7)(a) of the Act, 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).

- C. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall only burn pipeline quality natural gas.
- D. Pursuant to 40 CFR 60.44b(h) the standard in 40 CFR 60.44b(l)(1) applies at all times including periods of startup, shutdown, or malfunction.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the type of fuels fired in the boilers.
- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the heat input to the boilers in mmBtu/month and mmBtu/year.
- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of fuel usage in mmscf/month and mmscf/year.

h. i. Work Practice Requirements

- A. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any boiler 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 Requirements

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boiler and associated auxiliary equipment.
- B. Pursuant to Section 39.5(7)(b) and (d), the Permittee shall comply with the following inspection and tune-up requirements for the boilers. Inspections/tune-ups shall be conducted annually:
  - I. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, but each burner shall be inspected at least once every 36 months).
  - II. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
  - III. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
  - IV. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
  - V. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a

dry or wet basis, as long as it is the same basis before and after the adjustments are made).

Recordkeeping Requirements

- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of each monthly inspection and annual tune-up 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) and (e) of the Act, the Permittee shall keep records onsite of annual tune-ups containing the following information:
  - I. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
  - II. The type and amount of fuel used over the 12 months prior to the annual tune-up of the boiler.
- E. Pursuant to 40 CFR 60.49b(d)(1), the Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor as defined in 40 CFR 60.41b for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

**3. Non-Applicability Determinations**

- a. The WCCUP boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for 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 HAPs.
- b. The WCCUP boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial-Commercial-Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are gas-fired as defined by 40 CFR 63.11237 and, therefore, not subject pursuant to 40 CFR 63.11195(e).
- c. The WCCUP boilers are not subject to 35 IAC 214.161, because the boilers fire natural gas and not solid fuel.
- d. The WCCUP boilers are not subject to 35 IAC 217.141, Subpart C, Existing Fuel Combustion Emission Sources, because the boilers were constructed after 1971 and are considered new.
- e. The WCCUP boilers are not subject to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, use of organic material.
- f. The WCCUP boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, CO, VOM, SO<sub>2</sub>, and HAP, because the boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.
- g. The WCCUP boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for NO<sub>x</sub>, because the boilers use passive control.



measures, such as a combustion or other process design feature or characteristic, that is not considered a control device because it acts to prevent the pollutants from forming.

#### 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)(b) and (f) of the Act. Addresses are included in Attachment 3.

##### a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(b) and (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 4.3.2(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.

##### b. Federal Reporting

- i. Pursuant to 40 CFR 60.49b(b) the Permittee shall submit to the Illinois EPA, Compliance Section, the performance evaluation of the NO<sub>x</sub> CEMS using the applicable performance specifications in Appendix B of this part. This information shall be submitted with the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. Pursuant to 40 CFR 60.49b(i), the Permittee shall submit reports containing the information recorded in Condition 4.3.2(c)(ii)(I), along with the Semiannual Monitoring Report required by Condition 3.5(b).

## Section 4 - Emission Unit Requirements

### 4.4 Boilers (West Campus Central Utility Plant, Back Up Operation, NSPS Db)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Boiler-1 (300 mmBtu/hr, distillate oil)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , HAP, VOM	December 2007	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> CEMS
Boiler-2 (300 mmBtu/hr, distillate oil)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , HAP, VOM	December 2007	N/A	Low NO <sub>x</sub> burner	NO <sub>x</sub> CEMS

#### 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 212.122(a), except as provided by 35 IAC 212.122(b), no person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emission unit for which construction or modification commenced on or after April 14, 1972, with actual heat input greater than 73.2 MW (250 mmBtu/hr), having an opacity greater than 20 percent.

##### 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 visible emissions in accordance with Method 22 for visible emissions each time the boilers are heating the source on distillate oil. 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 and/or maintenance and repair. 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, Method 9, in accordance with Condition 4.4.2(a) (ii) (D) 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 visible emissions 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 Method 9 opacity measurements in accordance with Condition 4.4.2(a) (ii) (A) and (B) above.

b. i. Particulate Matter Requirements (PM)

- A. Pursuant to 35 IAC 212.206, the emissions of particulate matter from each boiler in any one hour shall not exceed 0.15 kg of particulate matter per MW-hr of actual heat input using liquid fuel exclusively (0.10 lbs/mmBtu).
- B. Pursuant to Construction Permit #06080015, PM/PM10 emissions from each boiler shall not exceed 0.024 lb/mmBtu and 7.2 lb/hr. [T1]
- C. Pursuant to Construction Permit #06080015, PM/PM10 emissions from both boilers shall not exceed 2.0 ton/year. [T1]
- D. Pursuant to 40 CFR 60.43b(h) (5), of NSPS Subpart Db, the Permittee does not have to meet the PM limits contained in this regulation if using fuel oil that contains no more than 0.3 weight percent sulfur.

ii. Compliance Method (PM Requirements)

Testing

- A. Pursuant to Section 39.5(7) (d) of the Act, the boilers shall be tested by USEPA Method 5 upon operation of 48 hours in this mode in a calendar year. Testing shall occur within 90 days after the 48 hours per calendar year threshold has been exceeded.
- B. Pursuant to Section 39.5(7) (a), the Permittee shall also comply with the requirements in Section 7.1.

Recordkeeping

- C. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.
- D. Pursuant to 40 CFR 60.49b(r) (1), the Permittee shall obtain and maintain at the facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil.

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

- A. Pursuant to 35 IAC 214.121(b) (2) the emissions of sulfur dioxide in any one-hour period from any new fuel combustion emission source greater than 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, shall not exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- B. Pursuant to 35 IAC 214.161(b) (2), the owner or operator of a fuel combustion emission source, burning liquid fuel exclusively, will use a distillate fuel oil that has a sulfur content that does not exceed 15 ppm.
- C. Pursuant to 40 CFR 60.42b(k) (2), the Permittee does not have to meet the SO<sub>2</sub> limits contained in 40 CFR 60.42b(k) (1) if complying by the use of fuel oil with a SO<sub>2</sub> potential emission rate of 0.32 lb/mmBtu heat input, but pursuant to 40 CFR 60.49b(r), it must meet recordkeeping requirements.
- D. Pursuant to Construction Permit #06080015, emissions of SO<sub>2</sub> from each boiler shall not exceed 17.1 lb/hr. [T1]
- E. Pursuant to Construction Permit #06080015, emissions of SO<sub>2</sub> from both boilers shall not exceed 4.0 ton/year. [T1]

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

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to 35 IAC 214.161(b)(3), the owner or operator must maintain records demonstrating that the fuel oil meets the required standard for sulfur content. The records must be kept for 5 years and provided to the agency within 30 days upon the receipt of a request by the Agency.
- C. Pursuant to 40 CFR 60.49(r), the Permittee shall keep records in accordance with Condition 4.4.2(b)(ii)(C).
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of SO<sub>2</sub> emissions from the boilers when fired with distillate fuel oil including supporting calculations (pounds/mmBtu).
- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in pounds/hour, tons/month, and tons/year.
- F. Pursuant to 40 CFR 60.49b(r)(1), the Permittee shall obtain and maintain at the facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil.

d. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to Construction Permit #06080015, emissions of VOM from each boiler shall not exceed 1.6 lb/hr. [T1]
- B. Pursuant to Construction Permit #06080015, emissions of VOM from both boilers shall not exceed 0.4 tons/year. [T1]

ii. Compliance Method (VOM Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, 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).

Record Keeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.

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.

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- B. Pursuant to Construction Permit #06080015, emissions of CO from each boiler shall not exceed 0.036 lb/mmBtu and 10.9 lb/hr. [T1]
- C. Pursuant to Construction Permit #06080015, emissions of CO from both boilers shall not exceed 3.0 ton/year. [T1]

ii. Compliance Method (CO Requirements)

Monitoring

- A. Sufficient periodic monitoring requirements are addressed by the work practice requirements in 4.4.2(i).

Record Keeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.

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

- A. Pursuant to 40 CFR 60.44b(1)(1) gases containing NO<sub>x</sub> discharged into the atmosphere from a facility shall not exceed 86 ng/J (0.20 lb/mmBtu) heat input when the facility combusts oil.
- B. Pursuant to 35 IAC 217.164, no person shall cause or allow emissions of NO<sub>x</sub> into the atmosphere from any industrial boiler to exceed .10 lbs/mmBtu using distillate fuel oil. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.
- C. Pursuant to Construction Permit #06080015, NO<sub>x</sub> emissions from each boiler shall not exceed 21.7 lb/hr. [T1]
- D. Pursuant to Construction Permit #06080015, NO<sub>x</sub> emissions from both boilers shall not exceed 2.7 ton/yr. [T1]
- E. Pursuant to Sections 39.5(7)(a) of the Act, 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).

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

Monitoring

- A. Pursuant to 40 CFR 60.44b(i), compliance with the emission limits is determined on a 30-day rolling average basis.
- B. Pursuant to 40 CFR 60.46b(c), (e) and 40 CFR 60.48b(b)(1), the Permittee shall calibrate, maintain and operate CEMS for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>).
- C. Pursuant to 40 CFR 60.48b(e), the Permittee shall evaluate and operate the continuous emissions monitoring system according to the procedures of 40 CFR 60.13.
- D. Pursuant to 40 CFR 60.48b(f), when NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7A or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

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- E. Pursuant to Construction Permit #06080015, in addition to determining compliance with the NO<sub>x</sub> standard of the NSPS, the CEMS shall also be used to address compliance with the NO<sub>x</sub> emission limitations in Condition 4.4.2(e) (i) (B) and (C). [T1]

Recordkeeping

- F. Pursuant to 40 CFR 60.48b(b) (1) and (c), the Permittee shall record the output of the CEMS during all periods of operation except during CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- G. Pursuant to 40 CFR 60.48b(d), the Permittee shall measure the 1-hour average NO<sub>x</sub> emission rates from the CEMS in ng/J or lb/mmBtu heat input and use this to calculate the average emission rates. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h) (2).
- H. Pursuant to 40 CFR 60.48b(e) (2), the span value for NO<sub>x</sub> is determined using one of the procedures in 40 CFR 60.48b(e) (2) (i) or (ii).
- I. Pursuant to 40 CFR 60.49b(g), the Permittee shall maintain records of the following information for each steam generating unit operating day:
- I. Calendar date;
  - II. The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/mmBtu heat input) measured or predicted;
  - III. The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/mmBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
  - IV. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - V. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - VI. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - VII. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - VIII. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - IX. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
  - X. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this part.

- J. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, pounds/hour, ton/month, and ton/year.
- K. Pursuant to Construction Permit #14010002, the following records shall be kept for each boiler:
  - I. The average hourly NOx emission data as determined by the CEMS or PEMS.
  - II. The ozone season (May 1<sup>st</sup> through September 30<sup>th</sup>) and annual NOx emissions (pounds).
  - III. The ozone season average and annual average NOx emission rates (lbs/mmBtu heat input), calculated within 30 days of the end of the averaging periods (i.e., calculated by October 30 for ozone season averaging period and by January 30 of the following year for annual averaging period).

g. i. Hazardous Air Pollutant Requirements (HAP)

- A. Pursuant to Construction Permit #06080015, emissions of Formaldehyde from each boiler shall not exceed 0.0002 lb/mmBtu. [T1]
- B. Pursuant to Construction Permit #06080015, emissions of Formaldehyde from both boilers shall not exceed 0.1 ton/year. [T1]
- C. Pursuant to Construction Permit #06080015, emissions of Hexane from each boiler shall not exceed 0.0002 lb/mmBtu. [T1]
- D. Pursuant to Construction Permit #06080015, emissions of Hexane from both boilers shall not exceed 0.1 ton/year. [T1]

ii. Compliance Method (HAP Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the above emissions from the boiler including supporting calculations in lb/mmBtu, ton/month, and ton/year.

h. i. Operational and Production Requirements

- A. Pursuant to Construction Permit #06080015, distillate oil shall be the only fuels fired in the boilers: [T1]
  - I. The fuel usage by the boilers shall not exceed the distillate oil usage of 544 thousand gallons per year. [T1]
- B. Pursuant to Section 39.5(7)(a) of the Act, the boiler shall not exceed 48 hours of periodic testing, periods of gas curtailment, gas supply and interruption on liquid fuel during a calendar year.
- C. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall only use very low sulfur oil that contains less than 0.3% weight sulfur.

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- D. Pursuant to Sections 39.5(7)(a) of the Act, 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).
  - E. Pursuant to 40 CFR 60.44b(h), the 40 CFR 60.44b(1)(1) applies at all times including start-up, shut down and malfunction.
- ii. Compliance Method (Operational and Production Requirements)
- Recordkeeping
- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the type of fuels fired in the boilers with sulfur content.
  - B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the heat input to the boilers in mmBtu/month and mmBtu/year.
  - C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of fuel usage in gallons per month and gallons per year.
  - D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the reason for distillate oil use and hours of operation when fired with distillate fuel oil (hours/month and hours/year).

i. i. Work Practice Requirements

- A. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any boiler 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 Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform monthly inspections of the boiler and associated auxiliary equipment.
- Recordkeeping
- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of each monthly 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.
  - C. Pursuant to 40 CFR 60.49b(d)(1), the Permittee shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor as defined in 40 CFR 60.41b for distillate oil. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.



### 3. Non-Applicability Determinations

- a. The WCCUP boilers are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60 Subpart Dc, because the boilers have a heat input capacity greater than 100 mmBtu/hr.
- b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Industrial-Commercial-Institutional Boilers Area Sources, 40 CFR Part 63 Subpart JJJJJJ, because the boilers are gas-fired as defined by 40 CFR 63.11237 and, therefore, not subject pursuant to 40 CFR 63.11195(e).
- c. The WCCUP boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for 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 HAPs.
- d. The WCCUP boilers are not subject to 35 IAC 217.141, Subpart C, Existing Fuel Combustion Emission Sources, because the boilers were constructed after 1971 and are considered new.
- e. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, use of organic material.
- f. The WCCUP boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, SO<sub>2</sub>, CO, NO<sub>x</sub>, VOM and HAPs, 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:
  - 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), 4.4.2(g)(i), 4.4.2(h)(i), and 4.4.2(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.

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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.

**b. Federal Reporting**

- i. Pursuant to 40 CFR 60.49b(b) the Permittee shall submit to the Illinois EPA, Compliance Section, the performance evaluation of the NO<sub>x</sub> CEMS using the applicable performance specifications in Appendix B, Specification 2 of 40 CFR 60 Subpart Db. This information shall be submitted with the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. Pursuant to 40 CFR 60.49b(r) the Permittee shall submit to the Illinois EPA, Air Compliance Section, a report certifying that only very low sulfur oil was used during the reporting period. This information shall be submitted with the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. Pursuant to 40 CFR 60.49b(h) (3), the Permittee must report excess emission reports for all 6-minute periods during which the average opacity exceeded the standard in Condition 4.4.2(a) (i) (A) during the reporting period. This information shall be submitted with the Semiannual Monitoring Report required by Condition 3.5(b).
- iv. Pursuant to 40 CFR 60.49b(i), the Permittee shall submit reports containing the information recorded in Condition 4.4.2(e) (ii) (I), along with the Semiannual Monitoring Report required by Condition 3.5(b).

## Section 4 - Emission Unit Requirements

### 4.5 Gasoline Storage Tank

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
12,000-gal Gasoline Storage Tank	VOM	N/A	None	Submerged Loading Pipe, Vapor Recovery System	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. Volatile Organic Material Requirements (VOM)

- A. Pursuant to 35 IAC 218.583(a) the Permittee shall not cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:
- I. The tank is equipped with a submerged loading pipe.
  - II. The vapors displaced from the storage tank during filling and processed by a vapor control system that includes a:
  - III. A vapor collection system that meets the requirements of 218.583(d) (4); and  
The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 218.584(b) or (d).
  - IV. All tank vent pipes are equipped with pressure/vacuum relief valves and shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column.
- B. Pursuant to 35 IAC 218.583(c), the Permittee shall:
- I. Install all control systems and make all process modifications required by 35 IAC 218.583(a);
  - II. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and
  - III. Repair, replace or modify any worn out or malfunctioning component or element of design.

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

Monitoring

- A. Pursuant to 35 IAC 218.583(d) and 39.5(7)(a) of the Act, the Permittee of a gasoline dispensing operation shall fulfill the following by making monthly inspections:
- I. Maintain and operate each vapor control system in accordance with the owner's instructions;
  - II. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
  - III. Maintain gauges, meters or other specified testing devices in proper working order;
  - IV. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
    - A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B incorporated by reference in Section 218.112 of this Part; and
    - Avoidable leaks of liquid during the filling of storage tanks; and
  - V. Pursuant to 39.5(7)(a) of the Act, the Permittee shall check for the presence and integrity of a submerged loading pipe
  - VI. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall check for spills, missing gaskets, and proper placement of covers.
  - VII. Pursuant to Section 39.5(7)(a) of the Act, within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the lower explosive limit above.

Testing

- B. Pursuant to 218.583(a)(4), the Permittee demonstrates compliance with Condition 4.5.2(a)(i)(A)(III), annually by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, Permittee shall maintain records of the tank vent pipe pressure, the date/time pressure was recorded, and the date/time of product delivery into the tank.
- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the presence of the submerged loading pipe.
- E. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records demonstrating that the vapor recovery system meets 100 percent or greater than the lower explosive limit with all supporting information necessary to show that EPA 450/2-78-05 procedures were followed.

- F. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records demonstrating that the delivery vessel displayed the appropriate sticker.
- G. Pursuant to Section 39.5(7)(b) and (e) 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.

b. i. Operational and Production Requirements

- A. Pursuant to Section 39.5(7)(a), the average monthly gasoline throughput shall not exceed 10,000 gallons.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- A. Pursuant to Sections 39.5(7)(b) and (e) of the Act, compliance shall be determined by the use of a monthly rolling average (the sum of the data for the current month plus the preceding 11 months).
- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep monthly and annual records of gasoline throughput in gallons.
- C. Pursuant to 40 CFR 63.11116(4)(b) and (e), the Permittee must have records available within 24 hours of a request by the Illinois EPA/USEPA, indicating that throughput is less than 10,000 gallons/month.

c. i. Work Practice Requirements

- A. Pursuant to 40 CFR 63.11116, Gasoline Dispensing Facilities, Subpart CCCCCC, requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline, the Permittee, must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time.
- B. Pursuant to 40 CFR 63.11130, the Permittee must comply with the General Provisions contained in Section 7.3(a).

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to 40 CFR 63.11116(a), (b), (c) and (d), the Permittee must do the following:
  - I. Minimize gasoline spills;
  - II. Clean up spills as expeditiously as practicable, but in no case later than four hours from the time the spill is identified.
  - III. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use or in portable gas containers that meet requirements of 40 CFR Part 59, Subpart F;

- IV. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of each spill and the corrective action used to clean the spill and prevent others.

**3. Non-Applicability Determinations**

- a. The storage tank is not subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels. (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because the capacity of the storage tank is less than 75 cubic meters (18,813 gallons) pursuant to 40 CFR 60.110b(a).
- b. The gasoline storage tank is not subject to 35 IAC 218.122(b), because the material being stored is gasoline, which is not defined as 'organic material' pursuant to 35 IAC 211.4250.
- c. The gasoline storage tank is not subject to 35 IAC 218.301 because the gasoline storage tank does not use organic material as defined in 35 IAC 211.4250(b).
- d. The gasoline storage tank is not subject to 35 IAC 218.586(c) because the average monthly gasoline throughput is less than 10,000 gallons.
- e. The gasoline storage tank is not subject to 35 IAC 218.581 and 218.582 the tank is not a bulk gasoline plant or bulk gasoline terminal as defined in 35 IAC 211.790 and 211.810, respectively.
- f. The storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM, because the tank does 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), and 4.5.2(c)(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).

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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.

b. **Federal Reporting**

- i. Pursuant to 40 CFR 63.11126, of NSPS Subpart CCCCCC, each owner or operator of a source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of a source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

## Section 4 - Emission Unit Requirements

### 4.6 Engines (DCAM, GCIS, Comer)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
1183 kW Diesel Engine Eng-1 (DCAM)	SO <sub>2</sub>	1995	None	None	None
1383 kW Diesel Engine Eng-2 (DCAM)	SO <sub>2</sub>	1995	None	None	None
1879 KW Diesel Engine, Eng-3 (GCIS)	SO <sub>2</sub>	2004	None	None	None
1879 KW Diesel Engine, Eng-4 (GCIS)	SO <sub>2</sub>	2004	None	None	None
2145 kW Diesel Engine Eng-7 (Comer)	SO <sub>2</sub>	2006	None	None	None

#### 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. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), except as provided by 35 IAC 212.123(b), 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.

##### 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 in accordance with Method 9 for visible emissions at least once every calendar year. One testing run shall be required to be of 30 minutes in length and two 6 minute averages may be used for the testing.

###### Recordkeeping

- B. 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.

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

- A. Pursuant to 35 IAC 214.305(a) (2), the sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm.

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

###### Recordkeeping

- A. Pursuant to 35 IAC 214.305(a) (3), records of the sulfur content for the fuel oil must be kept for at least 5 years.



c. i. Operational and Production Requirements

- A. Pursuant to Section 39.5(7) (a) of the Act, distillate fuel oils shall be the only fuels fired in the engines.
- B. Pursuant to 40 CFR 63.6675 and 40 CFR 63.6640 (f) (1), of Subpart ZZZZ, in order to be deemed emergency and not subject to the requirements of Subpart ZZZZ, the Permittee must use the RICE to provide electrical power or mechanical work during an emergency situation. There is no time limit on the use of emergency stationary RICE in an emergency situation.
- C. Pursuant to 40 CFR 63.6675 and 40 CFR 63.6640 (f) (2) of Subpart ZZZZ, in order to be deemed emergency and not subject to the requirements of Subpart ZZZZ, the Permittee must operate each engine less than equal or to 100 hours per calendar year for maintenance, testing and emergency demand response.
- D. Pursuant to 40 CFR 63.6675 and 40 CFR 63.6640 (f) (4) of Subpart ZZZZ, in order to be deemed emergency and not subject to the requirements of Subpart ZZZZ, the Permittee must operate each RICE for less than or equal to 50 hours per year in non-emergency situations and as described in 40 CFR 63.6640 (f) (4) (i) and (ii). This time is counted towards the 100 hours of operation in Condition 4.6(c) (i) (C) above.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- A. Pursuant to Section 39.5(7) (b), the Permittee shall maintain records of the type of fuel fired in the engines.
- B. Pursuant to 39.5(7) (b) and (d) of the Act the Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

d. i. Work Practice Requirements

- A. Pursuant to Section 39.5(7) (a) of the Act, the Permittee shall maintain and operate the engines 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 Sections 39.5(7) (a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the engines 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 any maintenance and repair activities that resulted in a modification or reconstruction of the piece of equipment.

### 3. Non-Applicability Determinations

- a. The engines 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 engines were constructed (ordered) prior to July 11, 2005.
- b. The engines are not subject to 35 IAC 212.321, because the emission units have no reasonable way of determining a process weight rate.
- 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 in 35 IAC 211.1920.
- e. The engines are not subject to 35 IAC 218.301, because diesel fuel oil is not an organic material as defined in 35 IAC 211.4250(b).
- f. The engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the 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 4.6.2(a)(i), 4.6.2(b)(i), 4.6.2(c)(i), and 4.6.2(d)(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 4 - Emission Unit Requirements

### 4.7 Engines (WCCUP, KCBD, Hospital Pavilion) - (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>
2000 kW Diesel Engine Eng-8 (WCCUP)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub> , HAP	2009	N/A	None	None
2180 kW Diesel Engine Eng-9 (KCBD)	PM, SO <sub>2</sub> , CO, NMHC + NO <sub>x</sub>	2008	N/A	None	None
2180 kW Diesel Engine Eng-10 (KCBD)	PM, SO <sub>2</sub> , CO, NMHC + NO <sub>x</sub>	2008	N/A	None	None
2000 kW Diesel Engine Eng-11 (Hosp Pav)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub>	2011	N/A	None	None
2000 kW Diesel Engine Eng-12 (Hosp Pav)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub>	2011	N/A	None	None
2000 kW Diesel Engine Eng-13 (Hosp Pav)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub>	2011	N/A	None	None
2000 kW Diesel Engine Eng-14 (Hosp Pav)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub>	2011	N/A	None	None
2000 kW Diesel Engine Eng-15 (Hosp Pav)	PM, SO <sub>2</sub> , VOM, CO, NMHC + NO <sub>x</sub> , NO <sub>x</sub>	2016	N/A	None	None

#### 2. Applicable Requirements

For the emission units in Condition 4.7.1 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), except as provided by 35 IAC 212.123(b), 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.
- B. Pursuant to 40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2), engines with a maximum engine power greater than or equal to 37 KW (50 HP), must meet the emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.113 for all pollutants beginning in model year 2007 as follows:
  - I. 20% Opacity during the acceleration mode
  - II. 15% Opacity during the lugging mode
  - III. 50% Opacity during the peaks in either the acceleration or lugging mode

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

Monitoring

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- 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 9 at least once every calendar year or no later than two calendar years for engines not operated during a given calendar year. In addition, a 30 minute run with two 6 minute averages will be used after the engine has been at full startup.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (c) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with Method 9. 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, and the findings of the observation including the opacity values obtained from the Method 9 observation.

b. i. Particulate Matter Requirements (PM)

- A. Pursuant to 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112, engines with a maximum engine power greater than or equal to 37 KW (50 HP), must meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007 as follows:

Exhaust emissions shall not exceed 0.2 g/kW-hr of particulate matter from each engine.

- B. Pursuant to 40 CFR 60.4212(c), exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, which is determined by the following:

NTE for each pollutant =  $1.25 \times \text{STD}$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112.

- C. Pursuant to 40 CFR 60.4205(e), the Permittee of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in 40 CFR 60.4212.
- D. Pursuant to Construction Permit #06080015, PM/PM<sub>10</sub> limits from Eng-8 shall not exceed 5.9 lb/hour and 0.15 tons/year. [T1]
- E. Pursuant to Construction Permit #11100019, PM emissions from Eng-11, Eng-12, Eng-13 and Eng-14 shall not exceed 0.2 lb/hr (each), 0.05 ton/yr (each), 0.2 ton/yr (total). [T1]

ii. Compliance Method (PM Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the not-to exceed (NTE) standard as determined by the equation in 40 CFR 89.112.
- C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of PM emissions including supporting calculations in g/kW-hr.
- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the PM emissions from the engines including supporting calculations in lb/hour, tons/month and tons/year.
- E. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of the manufacturer's emission-related written instructions and documentation of post-2007 model engine installation, configuration and maintenance.
- F. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep certification records and documentation related to 40 CFR 60.4211(g)(3) as applicable.

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

- A. Pursuant to 35 IAC 214.305(a)(2), the sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm.
- B. Pursuant to Construction Permit #11100019, emissions shall not exceed 0.1 lb/hr and 0.1 ton/year from Eng-11, Eng-12, Eng-13 and Eng-14. [T1]

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

Monitoring

- A. Pursuant to Sections 39.5(7)(a) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the SO<sub>2</sub> emissions from the engines including supporting calculations in lb/hour, tons/month and tons/year.
- C. Pursuant to 35 IAC 214.305(a)(3), records of the sulfur content for the fuel oil must be kept for at least 5 years.

d. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to Construction Permit #06080015, VOM emissions from Eng-8 shall not exceed 6.7 lbs/hour and 0.2 tons/year. [T1]
- B. Pursuant to Construction Permit #11100019, emissions from Eng-11, Eng-12, Eng-13 and Eng-14 shall not exceed 1.6 lb/hr (each), 0.4 ton/yr (each), 1.6 ton/yr (total). [T1]
- C. Pursuant to Sections 39.5(7)(a) of the Act, 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).

ii. Compliance Method (VOM Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the VOM emissions from the engines including supporting calculations in lb/hour, tons/month and tons/year.

e. i. Carbon Monoxide Requirements (CO)

- A. Pursuant to 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112, engines with a maximum engine power greater than or equal to 37 KW (50 HP), must meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007 as follows:

Exhaust emissions shall not exceed 3.5 g/kW-hr of carbon monoxide from each engine.

- B. Pursuant to 40 CFR 60.4212(c), exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, which is determined by the following:

$$\text{NTE for each pollutant} = 1.25 \times \text{STD}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112.

- C. Pursuant to Construction Permit #06080015, CO emissions from Eng-8 shall not exceed 17.9 lb/hour and 0.5 tons/year. [T1]
- D. Pursuant to Construction Permit #11100019, emissions from Eng-11, Eng-12, Eng-13 and Eng-14 shall not exceed 1.9 lb/hr (each), 0.5 ton/yr (each), 2.0 ton/yr (total). [T1]

ii. Compliance Method (CO Requirements)

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to Section 39.5(b) and (e) of the Act, the Permittee shall maintain records of CO emissions including supporting calculations in g/kW-hr.
- C. Pursuant to Section 39.5(b) and (e) of the Act, the Permittee shall maintain records of the not-to exceed (NTE) standard as determined by equation in 40 CFR 89.112.

- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the CO emissions from the engines including supporting calculations in lb/hour, tons/month and tons/year.
- E. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of the manufacturer's emission-related written instructions and documentation of post-2007 model engine installation, configuration and maintenance.
- F. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep certification records and documentation related to 40 CFR 60.4211(g)(3) as applicable.

f. i. Nitrogen Oxide Requirements (NO<sub>x</sub>) (includes NMHC + NO<sub>x</sub> requirements)

- A. Pursuant to 40 CFR 60.4205(b), 40 CFR 60.4202(a)(2) and 40 CFR 89.112, engines with a maximum engine power greater than or equal to 37 KW (50 HP), must meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007 as follows:
  - I. Exhaust emissions of NMHC + NO<sub>x</sub> shall not exceed 6.4 g/kW-hr from each engine.
- B. Pursuant to 40 CFR 60.4212(c), exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, which is determined by the following:

NTE for each pollutant = 1.25 x STD

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112.
- C. Pursuant to Construction Permit #06080015, NO<sub>x</sub> emissions from Eng-8 shall not exceed 83.1 lb/hour and 2.1 tons/year. [T1]
- D. Pursuant to Construction Permit #11100019, emissions from Eng-11, Eng-12, Eng-13 and Eng-14 shall not exceed 34.9 lb/hr (each), 8.7 ton/yr (each), 34.8 ton/yr (total). [T1]
- E. Pursuant to Construction Permit #16090018, the NO<sub>x</sub> emissions of Eng-15 shall not exceed 34.9 pounds/hour, except during startup and 8.7 tons per calendar year. These limits are based on the emission rate certified by the manufacturer. [T1]

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

Monitoring

- A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, 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

- B. Pursuant to 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of NO<sub>x</sub> emissions in either g/KW-hr.

- C. Pursuant to Section 39.5(b) and (e) of the Act, the Permittee shall maintain records of the not-to exceed (NTE) standard, as determined in 40 CFR 89.112.
- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of the manufacturer's emission-related written instructions and documentation of post-2007 model engine installation, configuration and maintenance.
- E. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the NO<sub>x</sub> emissions from the engines including supporting calculations in lb/hour, tons/month and tons/year.

g. i. **Operational and Production Requirements**

- A. Pursuant to 40 CFR 60.4206, the Permittee of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 60.4205 over the entire life of the engine.
- B. Pursuant to 40 CFR 60.4207(b), owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- C. Pursuant to Construction Permit #06080015, Eng-8 shall not operate more than 50 engine hours per year. [T1]
- D. Pursuant to Construction Permit #11100019, the rated electrical output capacity of Eng-11, Eng-12, Eng-13 and Eng-14 shall not exceed 2000 kWe, each. [T1]
- E. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the per-gallon requirements of 40 CFR 80.510(b) for nonroad diesel fuel as follows:
  - I. Sulfur content of 15 ppm maximum for non-road diesel fuel
  - II. Cetane index or aromatic content as follows:
    - 1. A minimum cetane index of 40; or
    - 2. A maximum aromatic content of 35 volume percent
- F. Pursuant to 40 CFR 60.4211(c), the Permittee of a 2007 model year and later stationary CI internal combustion engine that complies with the emission standards specified in 40 CFR 60.4205(b) must comply 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 engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g).
- G. Pursuant to 40 CFR 60.4211(f), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine.



- I. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year.
- II. There is no time limit on the use of emergency stationary ICE in emergency situations.

The Permittee may petition the Illinois EPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.

- III. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.

The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

- H. Pursuant to 40 CFR 60.4211(g), if the Permittee does not install, configure, operate, and maintain the engines according to the manufacturer's emission-related written instructions, or the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance according to the following:

- I. The Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

- I. Pursuant to 40 CFR 60.4218, the engines are subject to 40 CFR 60 Subpart A, the General Provisions in Section 7.2(a).

ii. Compliance Method (Work Practice Requirements)

Monitoring

- A. Pursuant to 40 CFR 60.4209(a), a Permittee of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of engine operation in hours/month and hours/year from the non-

resettable hour meter and indicate how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

- C. Pursuant to Section 39.5(7)(b) and (e), the Permittee shall maintain records for each shipment of NRLM distillate fuel oil for the engines, including date, supplier and quantity.
- D. Pursuant to Section 39.5(7)(b) and (e), the Permittee shall maintain records of the engines' rated electrical output capacity in kWe.
- E. Pursuant to 40 CFR 60 Subpart IIII, the Permittee shall maintain records of the following items for each of the engines:
  - I. A file containing:
    - 1. The make, model, engine family, serial number, model year, maximum engine power and engine displacement.
    - 2. The manufacturer's specification for maximum capacity of each engine and copy of the manufacturer's certification of compliance with 40 CFR Part 89 or Part 1039, and associated emission rates.
  - II. Records demonstrating that the fuel complies with the requirements in Condition 4.7.2(i)(i)(C)(II), such as records from the fuel supplier indicating the sulfur content of the fuel, and maintain records indicating the date of purchase of the fuel.

**h. i. Work Practice Requirements**

- A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain and operate the engines 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 Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the engines and associated auxiliary equipment.
- B. Pursuant to 40 CFR 60.4211(a) the Permittee must do the following:
  - I. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions.
  - II. Change only those emission-related settings that are permitted by the manufacturer.

**Recordkeeping**

- C. Pursuant to Section 39.5(7)(b) and (e) 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 any maintenance and repair activities that resulted in a modification or reconstruction of the piece of equipment.

- D. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records of the manufacturer's emission-related written instructions and documentation of post-2007 model engine installation, configuration and maintenance.

### 3. Non-Applicability Determinations

- a. The engines are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for HAPS, 40 CFR Part 63 Subpart ZZZZ, because the engines are defined as emergency stationary RICE in 40 CFR 63.6675.
- 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 the engines do not use organic material as defined in 35 IAC 211.4250(b).
- f. The engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the 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 4.7.2(a)(i), 4.7.2(b)(i), 4.7.2(c)(i), 4.7.2(d)(i), 4.7.2(e)(i), 4.7.2(f)(i), 4.7.2(g)(i), and 4.7.2(h)(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.

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- C. The duration of the event.
- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.

## Section 4 - Emission Unit Requirements

### 4.8 Boilers (Residential)

#### 1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Residential Apartments					
Boiler 9 (3.0 mmBtu/hr, natural gas)	None	1927	N/A	None	None
Boiler 10 (3.0 mmBtu/hr, natural gas)	None	1927	N/A	None	None
Shapiro Hall					
Boiler 11 (3.0 mmBtu/hr, natural gas)	None	2012	N/A	None	None
Boiler 12 (3.0 mmBtu/hr, natural gas)	None	2012	N/A	None	None
Boiler 13 (3.0 mmBtu/hr, natural gas)	None	2012	N/A	None	None
North Campus Apartments					
Boiler 14 (6.0 mmBtu/hr, natural gas)	None	2016	N/A	None	None
Boiler 15 (6.0 mmBtu/hr, natural gas)	None	2016	N/A	None	None
Boiler 16 (6.0 mmBtu/hr, natural gas)	None	2016	N/A	None	None

#### 2. Applicable Requirements

For the emission units in Condition 4.8.1 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.

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

##### Monitoring Requirements

- A. Pursuant to Sections 39.5(7) (b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity in accordance with Method 22 for visible emissions at least once every calendar year for Boiler 9 and Boiler 10 and at least once every 5 years for Boiler 11, Boiler 12, Boiler 13, Boiler 14, Boiler 15 and Boiler 16. 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 and/or maintenance and repair. 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 Requirements

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

b. 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.

ii. Compliance Method (Operational or Production Requirements)

Recordkeeping Requirements

- A. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall maintain records of the type of fuel fired in the boilers.

c. 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 Requirements

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

Recordkeeping Requirements

- B. Pursuant to Section 39.5(7)(b) and (e) 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. The boilers are not subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc, because the boilers are less than 10 mmBtu/hr pursuant to 40 CFR Part 60.40c(a).
- b. The boilers are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial-Commercial-Institutional Boilers Area Sources, 40 CFR 63 JJJJJJ, because the boilers burn natural gas only.

- c. The boilers are not subject to 35 IAC 212 Subpart E because the boilers use natural gas exclusively.
- d. The boilers are not subject to 35 IAC 214.161 because the boilers use natural gas exclusively.
- e. The boilers are not subject to 35 IAC 216.121 because the boilers are less than 10 mmBtu/hr.
- f. Pursuant to 35 IAC 218.303, the provisions of 35 IAC 218.301 and 218.302 shall not apply to fuel combustion emission sources.
- g. The boilers are not subject to 35 IAC 217.141 because the heat input of the boilers are less than 250 mmBtu/hr.
- h. The boilers are not subject to 35 IAC 217.150, because their NO<sub>x</sub> emissions do not meet the applicable thresholds.
- i. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers 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 4.8.2(a)(i), 4.8.2(b)(i), and 4.8.2(c)(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.

## Section 5 - Additional Title I Requirements

This Section is reserved for Title I requirements not specified in Sections 3 or 4. As of the date of issuance of this permit, there are no Title I requirements that need to be separately addressed in this Section.



## 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:

Insignificant Activity	Number of Units	Insignificant Activity Category
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. Pursuant to 40 CFR 60.4218, 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.
- B. Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60 Subpart JJJJ).
  - I. The engines shall meet the emission limitation requirements of 40 CFR 60.4233.
  - II. Pursuant to 40 CFR 60.4246, the engines shall meet the applicable general provisions of 40 CFR 60 Subpart A. See Condition 7.2(a).
  - 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 JJJJ.

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

- A. Standards of Performance for Stationary Reciprocating Internal Combustion Engines (40 CFR 63 Subpart ZZZZ):

## Section 6 - Insignificant Activities Requirements

- I. Pursuant to 40 CFR 63.6585(f) and 40 CFR 63.6590(b) (3) (viii), the existing engines do not have to meet the requirements of this subpart 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 this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark 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:

Insignificant Activity	Number of Units	Insignificant Activity Category
Diesel Storage Tank (Motor Pool)	1	35 IAC 201.210(a) (1) and 201.211
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a) (4).	29	35 IAC 201.210(a) (4)
Direct combustion units used for comfort heating (hot water heater) and fuel combustion emission units as further detailed in 35 IAC 201.210(a) (4).	10	35 IAC 201.210(a) (4)
Storage tanks < 10,000 gallon with annual throughput < 100,000 gallon (not storing gasoline or any material listed as a HAP).	2	35 IAC 201.210(a) (10)
Storage tanks of gasoline, including gasoline/ethanol blend fuels, with a capacity of less than 2000 gallons	2	35 IAC 201.210(a) (10) (B)
Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oil.	14	35 IAC 201.210(a) (11)
Gas turbines and stationary reciprocating internal combustion engines < 112 kW (150 HP).	5	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.	30	35 IAC 201.210(a) (16)
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.	2	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.

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- 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.
- e. Pursuant to 35 IAC 218.182, for each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182, except as provided in 35 IAC 218.181.
- f. Pursuant to 35 IAC 218 Subpart TT, VOM emissions from insignificant activities required to be included in determining applicability of 35 IAC 218 Subpart TT, in conjunction with applicable emission units in Section 4 of this permit, shall not equal or exceed 25 tons/yr.
- g. Pursuant to 35 IAC 218 Subpart TT, VOM emissions from each insignificant activity that is exempt from 35 IAC 218 Subpart TT shall not equal or exceed 2.5 tons per calendar year; and total VOM emissions from insignificant activities, in conjunction with applicable emission units in Section 4 of this permit not complying with 35 IAC 219.986, shall not exceed 5.0 tons per calendar year.

#### 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).
- 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.

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- C. The emissions of regulated air pollutants in lbs/hr and tons/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 described 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.
  - x. Notwithstanding conditions 7.1 above, a test plan need not be submitted under the following circumstances:
    - A. Where the Permittee intends to utilize a test plan previously submitted. However, the Permittee must submit a notice containing the following:
      - I. The purpose of the test;
      - II. Date the previously submitted test plan was submitted; and
      - III. A statement that the source is relying on a previously submitted test plan.
    - B. Where the source intends to use a standard test method or procedure. However, the Permittee must submit a notice containing the following:

- I. The purpose of the test; and
  - II. The standard test method or procedure to be used.
- 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 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) agree upon an alternative date 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, start-up/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. 40 CFR 60 Subpart A Requirements (NSPS)**

**a. 40 CFR 60 Subpart A and IIII - 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:

General Provisions citation	Subject of citation	Applies to subpart	Explanation
\$60.1	General applicability of the General Provisions	Yes	
\$60.2	Definitions	Yes	Additional terms defined in §60.4219.
\$60.3	Units and abbreviations	Yes	
\$60.4	Address	Yes	
\$60.5	Determination of construction or modification	Yes	
\$60.6	Review of plans	Yes	
\$60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
\$60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
\$60.9	Availability of information	Yes	
\$60.10	State Authority	Yes	
\$60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
\$60.12	Circumvention	Yes	
\$60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
\$60.14	Modification	Yes	
\$60.15	Reconstruction	Yes	
\$60.16	Priority list	Yes	
\$60.17	Incorporations by reference	Yes	
\$60.18	General control device requirements	No	
\$60.19	General notification and reporting requirements		

**3. 40 CFR 63 Subpart A Requirements (NESHAP)**

**a. 40 CFR 63 Subpart A and CCCCCC - Gasoline Dispensing Facilities**

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

Citation	Subject	Brief description	Applies to subpart CCCCCC
\$63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in \$63.11111.
\$63.1(c) (2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, \$63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
\$63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in \$63.11132.
\$63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
\$63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
\$63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to \$63.11116
\$63.6(a)	Compliance with Standards/Operation & Maintenance-Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
\$63.6(b) (1) - (4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
\$63.6(b) (5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
\$63.6(b) (6)	[Reserved]		



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

\$63.6(b) (7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
\$63.6(c) (1) - (2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
\$63.6(c) (3) - (4)	[Reserved]		
\$63.6(c) (5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
\$63.6(d)	[Reserved]		
63.6(e) (1) (i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. See §63.11115 for general duty requirement.
63.6(e) (1) (ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
\$63.6(e) (2)	[Reserved]		
\$63.6(e) (3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
\$63.6(f) (1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
\$63.6(f) (2) - (3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
\$63.6(g) (1) - (3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
\$63.6(h) (1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
\$63.6(h) (2) (i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
\$63.6(h) (2) (ii)	[Reserved]		

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

\$63.6(h) (2) (iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
\$63.6(h) (3)	[Reserved]		
\$63.6(h) (4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
\$63.6(h) (5) (i), (iii) - (v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
\$63.6(h) (5) (ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
\$63.6(h) (6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
\$63.6(h) (7) (i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
\$63.6(h) (7) (ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
\$63.6(h) (7) (iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
\$63.6(h) (7) (iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to \$63.8(e); COMS are properly maintained and operated according to \$63.8(c) and data quality as \$63.8(d)	No.
\$63.6(h) (7) (v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
\$63.6(h) (8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.

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\$63.6(h) (9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
\$63.6(i) (1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
\$63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
\$63.7(a) (2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
\$63.7(a) (3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
\$63.7(b) (1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
\$63.7(b) (2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
\$63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
\$63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e) (1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, \$63.11120(d) specifies conditions for conducting performance tests.
\$63.7(e) (2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
\$63.7(e) (3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
\$63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.

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\$63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
\$63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
\$63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
\$63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
\$63.8(a)(3)	[Reserved]		
\$63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
\$63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
\$63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each source or after combined with another source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
\$63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
\$63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
\$63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
\$63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.

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\$63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
\$63.8(f) (1) - (5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
\$63.8(f) (6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
\$63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
\$63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
\$63.9(b) (1) - (2), (4) - (5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
\$63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
\$63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
\$63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
\$63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
\$63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
\$63.9(h) (1) - (6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
\$63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.

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\$63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
\$63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
\$63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
\$63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
\$63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. See \$63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
\$63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
\$63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
\$63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
\$63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
\$63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
\$63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
\$63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
\$63.10(b)(3)	Records	Applicability determinations	Yes.
\$63.10(c)	Records	Additional records for CMS	No.
\$63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
\$63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
\$63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.

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\$63.10(d) (4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
\$63.10(d) (5)	SSM Reports	Contents and submission	No. See \$63.11126(b) for malfunction reporting requirements.
\$63.10(e) (1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
\$63.10(e) (3) (i)-(iii)	Reports	Schedule for reporting excess emissions	No.
\$63.10(e) (3) (iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c) (7)-(8) and 63.10(c) (5)-(13)	No.
\$63.10(e) (3) (iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c) (7)-(8) and 63.10(c) (5)-(13)	No, \$63.11130(K) specifies excess emission events for this subpart.
\$63.10(e) (3) (vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c) (5)-(13) and 63.8(c) (7)-(8)	No.

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\$63.10 (e) (4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
\$63.10 (f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
\$63.11 (b)	Flares	Requirements for flares	No.
\$63.12	Delegation	State authority to enforce standards	Yes.
\$63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
\$63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
\$63.15	Availability of Information	Public and confidential information	Yes.



**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)	14.8
Sulfur Dioxide	(SO <sub>2</sub> )	4.3
Particulate Matter	(PM)	28.6
Nitrogen Oxides	(NO <sub>x</sub> )	336.0
HAP, not included in VOM or PM	(HAP)	0
Total		383.7

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

Section	Emission Units	Description
4.1	Boilers (South Steam Plant)	These are natural gas fired boilers with Low-NOx burners that supply steam to the University of Chicago campus and Medical Center buildings for comfort purposes.
4.2	Boilers (South Steam Plant, Back Up Operation)	This is back up operation during natural gas curtailment when the boilers are fired with distillate oil.
4.3	Boilers (West Campus Central Utility Plant, NSPS Db)	These are natural gas fired boilers that supply steam to the University of Chicago campus and Medical Center buildings for comfort purposes. These boilers are subject to NSPS subpart Db.
4.4	Boilers (West Campus Central Utility Plant, Back Up Operation, NSPS Db)	This is back up operation during natural gas curtailment when the boilers are fired with distillate oil. These boilers are subject to NSPS subpart Db.
4.5	Gasoline Storage Tank	The Motor Pool Tank dispenses fuel to the University of Chicago facilities including the Police Department, Facilities, and Student/Staff transportation.
4.6	Engines (DCAM, GCIS, Comer)	These are diesel fired emergency engines that are used for the Duchossois Center, Gordon Center for Integrative Sciences, and the Comer Children's Hospital in the event of a power outage.
4.7	Engines (WCCUP, KCBD, Hospital Pavilion) - (NSPS IIIB)	These are diesel fired emergency engines subject to NSPS subpart IIIB. They are used at the West Campus Central Utility Plant, Knapp Center for Biomedical Discovery, and Center for Care and Discovery.
4.8	Boilers (Residential)	These are small (<10 mmBtu/hr) boilers that support the residential power demand. These include the Residential Apartments, Earl Shapiro Hall, and the North Campus Residential Hall.

## 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

## Attachment 3 - Contact and Reporting Addresses

<p>IEPA Compliance Section</p> <p>IEPA Stack Test Specialist</p> <p>IEPA Air Quality Planning 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>IEPA Air Regional Field Operations Regional Office #1</p> <p>IEPA Permit Section</p>	<p>Illinois EPA, Bureau of Air Regional Office #1 9511 Harrison Street Des Plaines, Illinois 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>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))	
<p style="margin-left: 40px;">AUTHORIZED SIGNATURE:</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>BY: _____</p> <p style="text-align: center;">AUTHORIZED SIGNATURE</p> <p>_____</p> <p style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</p> </div> <div style="width: 45%;"> <p>_____</p> <p style="text-align: center;">TITLE OF SIGNATORY</p> <p>_____/_____/_____</p> <p style="text-align: center;">DATE</p> </div> </div>	

## Bureau of Air Permit Section

### File Organization Cover Sheet

Source Name:	University of Chicago	
ID No.:	031600FLT	
Application No.:	95080059	
Category:	03L Air Permit - Operating	
Item Date:	12-04-2019	
Keyword:	FINAL	*
Comment:		*
Part:	Choose an item. of Choose an item.	*

\* If applicable

