Bureau of Air Permit Section
File Organization Cover Sheet

Source Name:	Sterigenics US LLC
ID Number:	043 110 AAC
Application Number:	95 12 0085
Category:	03K
Item Date:	06-08-2015

IEPA-DIVISION OF RECORDS MANAGEMENT
RELEASABLE

JUL 06 2015

REVIEWER: JKS

Submitted by L. Marr

Attention:

Sterigenics US LLC
Attn: Kevin Wagner
2015 Spring Road, Suite 650
Oak Brook, Illinois 60521

State of Illinois

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Source:

Sterigenics US LLC
7775 Quincy Street
Willowbrook, Illinois 60521

I.D. No.: 043110AAC
Permit No.: 95120085

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) 782-2829
BRUCE RAUNER, GOVERNOR LISA BONNETT, DIRECTOR

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Type of Application:	Renewal
Purpose of Application:	Renew Existing CAAPP Permit for 5 Years
ID No.:	043110AAC
Permit No.:	95120085
Statement of Basis No.:	95120085-0415
Date Application Received:	March 25, 2011
Date Issued:	June 8, 2015
Expiration Date:	June 8, 2020
Renewal Submittal Date:	9 Months Prior to June 8, 2020
Source Name:	Sterigenics US, LLC
Address:	7775 Quincy Street
City:	Willowbrook
County:	DuPage
ZIP Code:	60521

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

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

Raymond E. Pilapil/mtr

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

REP:MTR:BMN:psj

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

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Section 1 - Source Information

1. Addresses

Source

Sterigenics US LLC
7775 Quincy Street
Willowbrook, Illinois 60521

Owner

Sterigenics US LLC
2015 Spring Road, Suite 450
Oak Brook, Illinois 60523

Operator

Sterigenics US1 LLC
7775 Quincy Street
Willowbrook, Illinois 60521

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.

	Name	*Title*
Responsible Official	Kathleen Hoffman	Vice President
Delegated Authority	No other individuals have been authorized by the IEPA.	N/A

Other Contacts

	Name	*Phone No.*	*Email*
Source Contact	Kevin Wagner	630-928-1771	kwagner@sterigenics.com
Technical Contact	Kevin Wagner	630-928-1771	kwagner@sterigenics.com
Correspondence	Kevin Wagner	630-928-1771	kwagner@sterigenics.com
Billing	Kevin Wagner	630-928-1771	kwagner@sterigenics.com

3. Single Source

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

I.D. No.	*Permit No.*	*Single Source Name and Address*
N/A	N/A	N/A

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

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

3. General Provisions

a. Duty to Comply

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

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

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

c. Duty to Maintain Equipment

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

d. Disposal Operations

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

e. Duty to Pay Fees

i. The source must pay fees to the IEPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]

ii. The IEPA shall assess annual fees based on the allowable emissions of all regulated air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]

iii. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Act]

f. Obligation to Allow IEPA Surveillance

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

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

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. Sample or monitor any substances or parameters at any location at reasonable times:

A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or

B. As otherwise authorized by the Act.

v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

g. **Effect of Permit**

i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:

A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.

B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.

C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.

D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. **Severability Clause**

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

4. Testing

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

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.

15. Recordkeeping

a. **Control Equipment Maintenance Records**

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

b. **Retention of Records**

i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]

ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

c. **Availability of Records**

i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.

ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

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 April 22, 2015 (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. Startup, Shutdown, and Malfunction

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

Section 3 - Source Requirements

1. Applicable Requirements

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

a. Fugitive Particulate Matter

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

ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particular 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(b)(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 $150.00.

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. **NESHAP Standards (40 CFR 63 Subpart DDDDD)**

Pursuant to 40 CFR 63.7495(b), the Permittee must:

i. Meet the applicable general provisions of 40 CFR 63 Subpart A. See Condition 7.2(b).

ii. Have a one-time energy assessment performed on the source as specified in 40 CFR 63 Subpart DDDDD Table 3 Condition 3, pursuant to 40 CFR 63.7500(a)(1).

e. **Future Emission Standards**

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

2. Applicable Plans and Programs

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

a. **Fugitive PM Operating Program**

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_{10} Contingency Measure Plan**

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM_{10} Contingency Measure Plan reflecting the PM_{10} 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_{10} Contingency Measure Plan.

c. **Episode Action Plan**

Should this source become subject to 35 IAC 244.142, the Permittee shall prepare, submit, and operate under an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures and submitted to the IEPA for its review. The Episode Action Plan shall contain the information specified in 35 IAC 244.144. The Permittee shall immediately implement the appropriate steps described in this Episode Action Plan should an air pollution alert or emergency be declared. Any future Episode Action Plan made by the Permittee during the permit term is automatically incorporated by reference provided the Episode Action Plan is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Episode Action Plan. In the event that the IEPA notifies the Permittee of a deficiency with any 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.

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

i. Pursuant to 40 CFR 68.215(a), the Permittee shall have a Risk Management Plan registered with the USEPA that includes information required by 40 CFR 68.150.

ii. The Permittee shall keep a copy of the Risk Management Plan and shall update the Risk Management Plan with the USEPA pursuant to 40 CFR 68.190.

3. Title I Requirements

a. i. **Construction Permit 11050010 Requirements [T1]**

A. Pursuant to Construction Permit #11050010, VOM emissions from all sterilization chambers at the Willowbrook II facility shall not exceed the following limits:. [T1]

	Emissions	
Process	Tons/Month	Tons/Year
Vacuum Pump	0.20	1.16
Back Vent	0.21	1.22
Total	0.41	2.38

ii. Compliance Method (Construction Permit #11050010)

Monitoring

A. Compliance with monthly and annual VOM emission limits in 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. The Permittee shall maintain the following operational and emission records for the Willowbrook II facility:

I. VOM emissions (tons/month and tons/year) with supporting calculations and documentation.

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.

5.3 Reporting Requirements

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

a. **Prompt Reporting**

i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:

I. Requirements in Conditions 3.1(a)(i), 3.1(b), 3.1(c), 3.1(d), and 3.1(e).

II. Requirements in Conditions 3.2(a), 3.2(b), 3.2(c), and 3.2(d).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

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.

Monitoring Period	Report Due Date
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 Willowbrook I Sterilization Chambers

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
(6) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((6) Pallet Capacity (SC-1))	VOM	1984	1990	Acid Water Scrubber (Scrubber #1) or Acid Water Scrubber (Scrubber #2) with Dry Bed Reactor	Level Transmitter
(6) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((13) Pallet Capacity (SC-2))	VOM	1984	1998	Acid Water Scrubber (Scrubber #1) or Acid Water Scrubber (Scrubber #2) with Dry Bed Reactor	Level Transmitter
(1) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((3) Pallet Capacity (SC-3))	VOM	1984	1990	Acid Water Scrubber (Scrubber #1) or Acid Water Scrubber (Scrubber #2) with Dry Bed Reactor	Level Transmitter
(1) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((1) Pallet Capacity (SC-5))	VOM	1984	1990	Acid Water Scrubber (Scrubber #1) or Acid Water Scrubber (Scrubber #2) with Dry Bed Reactor	Level Transmitter

2. Applicable Requirements

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

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

A. Pursuant to 35 IAC 218.986, Subpart TT, every owner or operator of the above emission units shall have an emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

ii. Compliance Method (VOM Requirements)

Recordkeeping

A. Pursuant to 35 IAC 218.991, Subpart UU, the Permittee shall collect and record all of the following information each day and maintain the information at the source for a period of three years.

I. Control device monitoring data.

II. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

III. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

C. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, the Willowbrook I Sterilization Chambers are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.3 and Table 7.3.1, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Owner or Operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

b. i. Hazardous Air Pollutant Requirements (HAP)

A. Pursuant to 40 CFR 63.362(a), any source using greater than 10 tons of ethylene oxide shall reduce the emissions from the sterilization chamber vent by 99%.

ii. Compliance Method (HAP Requirements)

Monitoring

A. Pursuant to 40 CFR 63.363(b), the Permittee shall determine the efficiency of control devices used to comply with 40 IAC 63.362(c) using the test methods and procedures in 40 IAC 63.365(b) and shall operate them accordingly.

B. Pursuant to Section 39.5(7)(a) and (d), the Permittee shall inspect each scrubber once each year to ensure the proper functioning of each scrubber.

C. The operational and production requirements (4.1.2(c)(B),(C) and (D)) will insure compliance with the HAP requirement in 4.1.2(b)(i)(A).

Testing

D. Pursuant to Section 39.5(7)(b) and (d), the Permittee shall conduct a performance test to demonstrate the efficiency of one of the scrubbers within the first 18 months of the issuance of the permit and within 9 months of the receipt of the renewal CAAPP permit application. The performance test shall be conducted in accordance with 40 CFR 63.365 and all others referenced in that method. The Permittee shall comply with the applicable requirements in Condition 7.2.

E. Pursuant to Section 39.5(7)(b) and (d), the Permittee shall establish the maximum liquor tank level referenced in 40 CFR 63.365(e)(2) for each performance test.

Recordkeeping

F. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Records for periodic inspection of the acid water scrubber and dry bed reactor with date, individual performing the inspection, and nature of the inspection.

II. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

c. i. **Operational and Production Requirements**

A. Pursuant to Construction Permit #90080038, monthly usage of propylene oxide and ethylene oxide shall not exceed 2,800 lbs and 70,000 lbs respectively. [T1]

B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall not operate the Willowbrook I Sterilization Chambers with a level of scrubber liquor in the recirculation tank of Scrubber #2 which exceeds 159 inches or the liquor level from the most recent performance test. If Scrubber #1 is in operation, the scrubber recirculation tank shall not exceed 5,200 gallons.

C. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall exhaust no more than five of the Willowbrook I Sterilization Chambers to the acid scrubbers and dry bed reactors during the first evacuation.

D. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep the scrubber and recirculation tank pH below 2.

ii. Compliance Method (Operational and Production Requirements)

Monitoring

A. 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).

B. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall monitor the scrubber recirculation tank of Scrubber #2. If Scrubber #1 is in operation, the level of the recirculation tank of Scrubber #1 shall be monitored.

C. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall take a pH reading of the scrubber and scrubber recirculation tank when the recirculation tank is first charged with water and sulfuric acid. Following this, the pH shall be taken every week thereafter until the recirculation tank is emptied.

Recordkeeping

D. Pursuant to Section 39.5(7)(a) and (e), the following records shall be kept:

I. Ethylene oxide usage (tons/month and tons/year).

II. Propylene oxide usage (tons/month and tons/year).

III. The level of the scrubber liquor in the recirculation tank shall be recorded on a weekly basis.

IV. Records of a procedure in the control system that does not allow for more than five chambers to be evacuated during the first evacuation.

V. pH reading of the scrubber recirculation tank and scrubber for each sample taken.

3. Non-Applicability Determinations

a. The Willowbrook I Sterilization Chambers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63 Subpart WWWWW, because the Willowbrook I Sterilization Chambers are not part of a hospital.

b. The Willowbrook I Sterilization Chambers are not subject to 35 IAC 218.301, Subpart G, because the Willowbrook I Sterilization Chambers do not use a photochemically reactive material as defined by 35 IAC 211.4690.

c. The Willowbrook I Sterilization Chambers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for HAP because the Willowbrook I sterilization chambers are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

4. Other Requirements

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

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

i. Authorization for Federal Requirements

a. Malfunction Breakdown Requirements

Pursuant to 40 CFR 63.362 (b), the source is authorized to continue operation in violation of the applicable requirements of Conditions 4.1.2(b)(i)(A) for HAPs during malfunction breakdown. The Permittee shall comply with all applicable requirements in Section 7.3 of this permit.

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), and 4.1.2(c)(i).

II. Requirements in Condition 4.1.4(a)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.2 Willowbrook II Sterilization Chambers

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
(3) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((13) Pallet Capacity (SC-4))	VOM	1999	N/A	Willowbrook II Scrubber (WBII-Scrubber) and Dry Bed Reactor	Level Transmitter
(1) Ethylene Oxide/Propylene Oxide Sterilization Chambers ((26) Pallet Capacity (SC-4))	VOM	2012	N/A	Willowbrook II Scrubber (WBII-Scrubber) and Dry Bed Reactor	Level Transmitter

2. Applicable Requirements

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

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

A. Pursuant to 35 IAC 218.986, Subpart TT, every owner or operator of the above emission units shall have an emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit

ii. Compliance Method (VOM Requirements)

Monitoring

A. Sufficient monitoring to meet compliance with 4.2.2(a)(i)(A) is found in condition 4.2.2(b)(ii)(A).

Recordkeeping

B. Pursuant to 35 IAC 218.991, Subpart UU, the Permittee shall collect and record all of the following information each day and maintain the information at the source for a period of three years.

I. Control device monitoring data.

II. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

III. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

C. Pursuant to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, the Willowbrook II Sterilization Chambers are subject to 40 CFR Part 64. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Condition 7.3 and Table 7.3.2, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Owner or Operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, pursuant to 40 CFR 64.7(a) and (b).

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

A. Pursuant to 40 CFR 63.362(a), any source using greater than 10 tons of ethylene oxide shall reduce the emissions from the sterilization chamber vent by 99%.

ii. Compliance Method (HAP Requirements)

Monitoring

A. Pursuant to 40 CFR 63.363(b), the Permittee shall determine the efficiency of control devices used to comply with 40 IAC 63.362(c) using the test methods and procedures in 40 IAC 63.365(b) and shall operate them accordingly.

B. The operational and production requirements (4.2.2(c)(B),(C) and (D)) will insure compliance with the HAP requirement in 4.2.2(b)(i)(A).

Testing

C. Pursuant to Section 39.5(7)(b) and (d), the Permittee shall conduct a performance test to demonstrate the efficiency of one of the scrubbers within the first 18 months of the issuance of the permit and within 9 months of the receipt of the renewal CAAPP permit application being sent out. The performance test shall be conducted in accordance with 40 CFR 63.365 and all others referenced in that method. The Permittee shall comply with the applicable requirements in Condition 7.2.D. Pursuant to Section 39.5(7)(b) and (d), the Permittee shall establish the maximum liquor tank level referenced in 40 CFR 63.365(e)(2) for each performance test.

Recordkeeping

E. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Records for periodic inspection of the acid water scrubber and dry bed reactor with date, individual performing the inspection, and nature of the inspection.

II. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

III. The level of the scrubber liquor in the recirculation tank shall be recorded on a weekly basis.

c. i. **Operational and Production Requirements**

A. Pursuant to Construction Permit #11050010, the Permittee shall not use more than 20.4 tons/month and 122.1 tons/year of ethylene oxide and propylene oxide, total, for all sterilization chambers at the Willowbrook II facility. [T1]

B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall not operate the Willowbrook II sterilization chambers with a level of scrubber liquor in the recirculation tank which exceeds 202 inches or the liquor level from the most recent performance test.

C. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall exhaust no more than three (3) Willowbrook II sterilization chambers to the acid water scrubbers and dry bed reactors during the first evacuation.

D. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep the scrubber and scrubber recirculation pH below 2.

ii. Compliance Method (Operational and Production Requirements)

Monitoring

A. Compliance with monthly and annual usage limits for propylene oxide and ethylene oxide 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).

B. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall monitor the scrubber recirculation tank level of the WBII Scrubber.

C. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall take a pH reading of the scrubber and scrubber recirculation tank when the recirculation tank is first charged with water and sulfuric acid. Following this, the pH shall be taken every week thereafter until the recirculation tank is emptied.

Recordkeeping

D. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall maintain the following operational and emission records for the Willowbrook II facility:

I. Ethylene oxide usage (tons/month and tons/year).

II. Propylene oxide usage (tons/month and tons/year).

III. The level of the scrubber liquor in the recirculation tank shall be recorded on a weekly basis.

IV. Records of a procedure in the control system that does not allow for more than three chambers to be evacuated.

V. pH reading of the scrubber recirculation tank and scrubber for each sample taken.

3. Non-Applicability Determinations

a. The Willowbrook II Sterilization Chambers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63 Subpart WWWWW, because the Willowbrook II Sterilization Chambers do not reside in a hospital.

b. The Willowbrook II Sterilization Chambers are not subject to 35 IAC 218.301, Subpart G, because the Willowbrook II Sterilization Chambers do not use a photochemically reactive material as defined by 35 IAC 211.4690.

c. The Willowbrook II Sterilization Chambers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for ethylene oxide because the Willowbrook II Sterilization Chambers are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

d. The Willowbrook II Sterilization Chambers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for propylene oxide because the Willowbrook II Sterilization Chambers 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

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

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

i. Authorization for State Requirements

a. Malfunction Breakdown Requirements

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to continue operation in violation of the applicable requirements of Conditions 4.1.2(b)(i)(A) for HAPs during malfunction breakdown. The Permittee shall comply with all applicable requirements in Section 7.3 of this permit.

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 4.2.2(a)(i), 4.2.2(b)(i), and 4.2.2(c)(i).

II. Requirements in Condition 4.2.4(a)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.3 Willowbrook I Aeration Rooms

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
(3) Aeration Rooms (AR)	VOM	1984	1998	Acid Water Scrubber (Scrubber #2) with Dry Bed Reactor	Level Transmitter

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. Volatile Organic Material Requirements (VOM)

A. Pursuant to 35 IAC 218.986, Subpart TT, every owner or operator of the above emission units shall have an emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

B. Pursuant to Construction Permit #96120054, the emissions of the aeration rooms shall not exceed the following VOM limits: [T1]

	Operating Hours	Volatile Organic Material Emissions	
Items of Equipment	(Hours/Year)	(Lbs/Hour)	(Tons/Year)
West Aeration Room	8,760	3.6	15.77

ii. Compliance Method (VOM Requirements)

Monitoring

A. Compliance with monthly and annual VOM emission limits for the west aeration room 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. Sufficient recordkeeping to meet compliance with 4.3.2(a)(i)(A) is found in condition 4.3.2(b)(ii)(B).

C. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall maintain the following operational and emission records for the Willowbrook I facility:

I. Ethylene oxide usage (tons/month and tons/year).

II. Propylene oxide usage (tons/month and tons/year).

III. Calculated VOM emissions based on the efficiency of the scrubber from the most recent performance test.

D. Pursuant to 35 IAC 218.991, the Permittee shall collect and record the following information each day:

I. Control device monitoring data.

II. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

III. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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

A. Pursuant to 40 CFR 63.362(d), each owner or operator of a sterilization source using 1 ton shall reduce ethylene oxide emissions to the atmosphere from each aeration room vent to a maximum concentration of 1 ppmv or by at least 99 percent, whichever is less stringent, from each aeration room vent.

ii. Compliance Method (HAP Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall not operate the Willowbrook I aeration rooms with a level of scrubber liquor in the recirculation tank of Scrubber #2 which exceeds 159 inches or the liquor level from the most recent performance test.

B Pursuant to 40 CFR 63.363(e), the facility has complied with the emissions limits under § 63.262 with a control technology other than acid-water scrubbers or catalytic or thermal oxidizers, and has provided to the Administrator information describing the design and operation of the air pollution control system, including recommendations for the operating parameters to be monitored to demonstrate continuous compliance. The Permittee has provided an approved monitoring plan as of December 6, 2002.

Testing

C. Pursuant to the alternative monitoring plan approved on December 12, 2002, the Permittee shall collect weekly samples of the exhaust from the stack to test the concentration of ethylene oxide using a Flame Ionization Detector or the Gas Chromatograph. Modified Method 18 testing shall be used to detect the presence of ethylene oxide per the alternative monitoring plan.

Recordkeeping

D. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Records for periodic inspection of the acid water scrubber and dry bed reactor with date, individual performing the inspection, and nature of the inspection.

II. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

III. The level of the scrubber liquor in the recirculation tank shall be recorded once per week.

E. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Record of the ethylene oxide concentration each week (in ppm) from the sampling period.

3. Non-Applicability Determinations

a. The Willowbrook I aeration rooms are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63 Subpart WWWWW, because the Willowbrook I aeration chambers do not reside in a hospital.

b. The Willowbrook I aeration rooms are not subject to 35 IAC 218.301, Subpart G, because the Willowbrook I aeration chambers do not use a photochemically reactive material as defined by 35 IAC 211.4690.

c. The Willowbrook I aeration rooms are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for ethylene oxide because the Willowbrook I aeration chambers are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

d. The Willowbrook I aeration rooms are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for propylene oxide because the Willowbrook I aeration chambers 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 4.3.2(a)(i), and 4.3.2(b)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.4 Willowbrook II Aeration Rooms

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
(2) Aeration Rooms. (WBII-AR)	VOM	1999	N/A	Willowbrook II Scrubber (WBII Scrubber) and Dry Bed Reactor	Level Transmitter

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. Volatile Organic Material Requirements (VOM)

A. Pursuant to 35 IAC 218.986, Subpart TT, every owner or operator of the above emission units shall have an emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

B. Pursuant to Construction Permit #11050010, VOM emissions from all aeration rooms at the Willowbrook II facility shall not exceed the following limits: [T1]

Process	VOM Emissions	
	Tons/Month	Tons/Year
Aeration rooms	---	0.05
Total	---	0.05

ii. Compliance Method (VOM Requirements)

Monitoring

A. Compliance with monthly and annual VOM emission limits for the west aeration rooms 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. Sufficient recordkeeping to meet compliance with 4.3.2(a)(i)(A) is found in condition 4.3.2(b)(ii)(B).

C. Pursuant to Section 39.5(7)(a) and (e), the Permittee shall maintain the following operational and emission records for the Willowbrook II facility:

I. Calculated VOM emissions based on the efficiency of the scrubber from the most recent performance test.

D. Pursuant to 35 IAC 218.991, the Permittee shall collect and record the following information each day:

I. Control device monitoring data.

II. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

III. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine

maintenance equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

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

A. Pursuant to 40 CFR 63.362(d), each owner or operator of a sterilization source using 1 ton shall reduce ethylene oxide emissions to the atmosphere from each aeration room vent to a maximum concentration of 1 ppmv or by at least 99 percent (60 ppm as per the alternative monitoring plan), whichever is less stringent, from each aeration room vent.

ii. Compliance Method (HAP Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall not operate the Willowbrook I Sterilization Chambers with a level of scrubber liquor in the recirculation tank which exceeds 202 inches or the liquor level from the most recent performance test.

B. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall not exhaust more than one (1) aeration room to the acid water scrubber and dry bed reactor at a time.

C. Pursuant to 40 CFR 63.363(e), the facility has complied with the emissions limits under § 63.262 with a control technology other than acid-water scrubbers or catalytic or thermal oxidizers, and has provided to the Administrator information describing the design and operation of the air pollution control system, including recommendations for the operating parameters to be monitored to demonstrate continuous compliance. The Permittee has provided an approved monitoring plan as of December 6, 2002.

Testing

D. Pursuant to the alternative monitoring plan approved on December 12, 2002, the Permittee shall collect weekly samples of the exhaust from the stack to test the concentration of ethylene oxide using a Flame Ionization Detector or the Gas Chromatograph. Modified Method 18 testing shall be used to detect the presence of ethylene oxide per the alternative monitoring plan.

Recordkeeping

E. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Records for periodic inspection of the acid water scrubber and dry bed reactor with date, individual performing the inspection, and nature of the inspection.

II. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

III. The level of the scrubber liquor in the recirculation tank shall be recorded once per week.

F. Pursuant to Section 39.5(7)(a) and (e), records of the following shall be kept:

I. Record of the ethylene oxide concentration each week (in ppm) from the sampling port.

3. Non-Applicability Determinations

a. The Willowbrook II aeration rooms are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Hospital Ethylene Oxide Sterilizers, 40 CFR Part 63 Subpart WWWWW, because the Willowbrook II aeration chambers do not reside in a hospital.

b. The Willowbrook II aeration rooms are not subject to 35 IAC 218.301, Subpart G, because the Willowbrook II aeration chambers do not use a photochemically reactive material as defined by 35 IAC 211.4690.

c. The Willowbrook II aeration rooms are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for ethylene oxide because the Willowbrook II aeration chambers are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

d. The Willowbrook II aeration rooms are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, for propylene oxide because the Willowbrook II aeration chambers 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 4.4.2(a)(i) and 4.4.2(b)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.5 Willowbrook I Boiler #1

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
Cleaver Brooks Natural Gas Fired Boiler (Boiler-1, 5 mmBtu/hr)	CO, NO_x	2013	N/A	None	None

2. Applicable Requirements

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

a. i. Opacity Requirements

A. Pursuant to 35 IAC 212.123, 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 Section 212.122 of this Subpart.

ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the Willowbrook I Boiler #1 in accordance with Method 22 for visible emissions at least once every calendar year in which the equipment operates. 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 Willowbrook I Boiler #1, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 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 opacity observation performed. 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 22 and Method 9 opacity measurements made in accordance with Condition 4.4.2(a)(ii)(A) above.

b. i. Carbon Monoxide Requirements (CO)

A. Pursuant to Construction Permit #12090024, the Boiler shall not exceed the following CO emission: [T1]

Pollutant	Limits	
	(Lb/Hour)	(Tons/Year)
CO	0.4	1.8

ii. Compliance Method (CO Requirements)

Monitoring

A. Compliance with monthly and annual CO emission limits for the Willowbrook I Boiler #1 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).

B. Pursuant to 40 CFR 63.7540(10(iv), the Permittee shall optimize CO emissions during the boiler tune-up.

Recordkeeping

C. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep records for the following:

I. Monthly and annual emissions of CO emissions (tons/month and tons/year) with supporting data or calculations.

II. Records of that the CO emissions were optimized during the tune-up.

c. i. Nitrogen Oxide Requirements (NO_x)

A. Pursuant to Construction Permit #12090024, the boiler shall not exceed the following NO_x emission limit: [T1]

Pollutant	Limits	
	(Lb/Hour)	(Tons/Year)
NO_x	0.5	2.2

ii. Compliance Method (NO_x Requirements)

A. Compliance with monthly and annual NO_x emission limits for the Willowbrook I Boiler #1 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 keep records for the following:

Monthly and annual emissions of NO_x emissions (tons/month and tons/year) with supporting data or calculations.

d. 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 Willowbrook I Boiler #1.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

A. The Permittee shall keep a record of the fuel usage and type of fuel used in the Willowbrook I Boiler #1.

e. i. **Work Practice Requirements**

A. Pursuant to 40 CFR 63.7500(e), NESHAP Subpart DDDDD, the Permittee must complete a tune-up every 5 years as specified in 40 CFR 63.7540(10)(i)-(iv).

ii. Compliance Method (Work Practice Requirements)

Recordkeeping

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

I. Date of the tune-up

II. Names of personnel completing the tune-up

III. All adjustments/corrective actions (i.e. to the flame pattern, air-to-fuel ratio, CO emissions)

3. Non-Applicability Determinations

a. The Willowbrook I Boiler #1 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 Willowbrook I Boiler #1 has a firing rate below 2.9 MW(10 mmBtu).

b. The Willowbrook I Boiler #1 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 JJJJJJ, because the Willowbrook I Boiler #1 is a major source that fires natural gas.

c. The Willowbrook I Boiler #1 is not subject to 35 IAC 212.201, because the Willowbrook I Boiler #1 does not fire solid fuel and solely fires natural gas.

d. The Willowbrook I Boiler #1 is not subject to 35 IAC 214.122, because the Willowbrook I Boiler #1 does not fire solid or liquid fuel and solely fires natural gas.

e. The Willowbrook I Boiler #1 is not subject to 35 IAC 215.301, because the Willowbrook I Boiler #1 is fuel combustion sources which are exempt from the rule, pursuant to 35 IAC 215.303.

f. The Willowbrook I Boiler #1 not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the Willowbrook I Boiler #1 do not use an add-on control device to achieve compliance with an emission limitation.

4. Other Requirements

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

5. Reporting Requirements

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

a. **Prompt Reporting**

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

I. Requirements in Conditions 4.5.2(a)(i), 4.5.2(b)(i), 4.5.2(c)(i),. 4.5.2(d)(i), and 4.5.2(e)(i).

B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).

iii. The deviation reports shall contain at a minimum the following information:

A. Date and time of the deviation.

B. Emission unit(s) and/or operation involved.

C. The duration of the event.

D. Probable cause of the deviation.

E. Corrective actions or preventative measures taken.

4.6 Willowbrook II Boilers #1 and #2

1. Emission Units and Operations

Emission Units	*Pollutants Being Regulated*	*Original Construction Date*	*Modification/ Reconstruction Date*	*Air Pollution Control Devices or Measures*	*Monitoring Devices*
Kewanee Model L35-80-G Natural Gas Fired Boiler (WBII - Boiler-1, 3.3 mmBtu/hr)	PM, CO, NO_x, SO_2, VOM	1999	N/A	None	None
Kewanee Model L35-80-G Natural Gas Fired Boiler (WBII - Boiler-2, 3.3 mmBtu/hr)	PM, CO, NO_x, SO_2, VOM	1999	N/A	None	None

2. Applicable Requirements

a. i. <u>Opacity Requirements</u>

A. Pursuant to 35 IAC 212.123, 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 Section 212.122 of this Subpart.

ii. <u>Compliance Method (Opacity Requirements)</u>

<u>Monitoring</u>

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the Willowbrook II Boilers #1 and #2 in accordance with Method 22 for visible emissions at least once every calendar year in which the equipment operates. 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 pipeline heaters and Boilers, maintenance and repair, and/or adjustment of fuel usage. If corrective action was taken, the Permittee shall perform a follow up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

<u>Recordkeeping</u>

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each opacity observation performed. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing 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 22 and Method 9 opacity measurements made in accordance with Condition 4.4.2(a)(ii)(A) above.

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 Willowbrook II Boilers #1 and #2.

ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

A. The Permittee shall keep a record of the fuel usage and type of fuel used in the Willowbrook II Boilers #1 and #2.

c. i. **Work Practice Requirements**

A. Pursuant to 40 CFR 63.7500(e), the Permittee must complete a tune-up every 5 years as specified in 40 CFR 63.7540(10)(i)-(iv).

ii. Compliance Method (Work Practice Requirements)

Recordkeeping

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

I. Date of the tune-up.

II. Names of personnel completing the tune-up.

III. All adjustments/corrective actions (i.e. to the flame pattern, air-to-fuel ratio, CO emissions).

3. Non-Applicability Determinations

a. The Willowbrook II Boilers #1 and #2 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 Willowbrook II Boilers #1 and #2 have a firing rate below 2.9 MW(10 mmBtu).

b. The Willowbrook II boiler #1 and #2 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 JJJJJJ, because the Willowbrook II Boilers #1 and #2 are a major sources that only fires natural gas.

c. The Willowbrook II boiler #1 and #2 are not subject to 35 IAC 212.201, because the Willowbrook II Boilers #1 and #2 do not fire solid fuel and solely fire natural gas.

d. The Willowbrook II boiler #1 and #2 are not subject to 35 IAC 214.122, because the Willowbrook II Boilers #1 and #2 do not fire solid or liquid fuel and solely fire natural gas.

e. The Willowbrook II boiler #1 and #2 are not subject to 35 IAC 215.301, because the Willowbrook II Boilers #1 and #2 are fuel combustion sources which are exempt from the rule, pursuant 35 IAC 215.303.

f. The Willowbrook II boiler #1 and #2 are not subject to 35 IAC 216.121, because Willowbrook II Boilers #1 and #2 have an actual heat input less than 2.9 MW (10 mmBtu/hr).

g. The Willowbrook II boiler #1 and #2 are not subject to 35 IAC 217.141, because the Willowbrook II Boilers #1 and #2 have an actual heat input less than 73.2 MW (250 mmBtu/hr) and are not located in the Chicago.

h. The Willowbrook II Boilers #1 and #2 not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the Willowbrook II Boilers #1 and #2 do not use an add-on control device to achieve compliance with an emission limitation or standard and do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

4. Other Requirements

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

5. Reporting Requirements

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

a. Prompt Reporting

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

I. Requirements in Conditions 4.6.2(a)(i), 4.6.2(b)(i), and 4.6.2(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*
Direct combustion units used for comfort heating and fuel combustion emission units as further detailed in 35 IAC 201.210(a)(4).	2	35 IAC 201.210(a)(4)

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

A. Pursuant to 40 CFR 63.7500(e), the Permittee must complete a tune-up every 5 years as specified in 40 CFR 63.7540(10)(i)-(iv).

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*
Storage tanks < 10,000 gallon with annual throughput < 100,000 gallon (not storing gasoline or any material listed as a HAP).	9	35 IAC 201.210(a)(10)

3. Insignificant Activities in 35 IAC 201.210(b)

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

4. Applicable Requirements

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

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

b. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.

c. Pursuant to 35 IAC 218.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.

d. Pursuant to 35 IAC 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 218.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.

e. Pursuant to 35 IAC 218 Subpart TT, VOM emissions from each insignificant activities 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 218.986, shall not exceed 5.0 tons per calendar year.

f. Pursuant to 35 IAC 218 Subpart RR, VOM emissions from each insignificant activities that is exempt from 35 IAC 218 Subpart RR shall not equal or exceed 1.0 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 218.966, 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. <u>Notification 7 Days in Advance</u>

i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):

A. A description of the emission unit including the function and expected operating schedule of the unit.

B. A description of any air pollution control equipment or control measures associated with the emission unit.

C. The emissions of regulated air pollutants in 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 describe in Condition 6.3, a notification is not required.

Section 7 - Other Requirements

1. Testing

a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:

i. The name and identification of the emission unit(s) being tested.

ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.

iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.

vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.

vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.

ix. Sampling of materials, QA/QC procedures, inspections, etc.

b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:

i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.

ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.

c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but

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

i. General information including emission unit(s) tested.

ii. A summary of results.

iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).

iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

v. Detailed description of test conditions, including:

A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.

B. Control equipment information, i.e., equipment condition and operating parameters during testing.

C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.

vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

vii. An explanation of any discrepancies among individual tests or anomalous data.

viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.

ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.

x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.

d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

2. 40 CFR 63 Subpart A Requirements (NESHAP)

a. 40 CFR 63 Subpart A and Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities

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

TABLE 1 OF SECTION 63.360 – GENERAL PROVISIONS APPLICABILITY TO SUBPART O

Reference	Applies to sources using 10 tons in Subpart O[a]	Applies to sources using 1 to 10 tons in Subpart O[a]	Comment
63.1(a)(1)	Yes		Additional terms defined in §63.361; when overlap between Subparts A and O occurs, Subpart O takes precedence.
63.1(a)(2)	Yes		
63.1(a)(3)	Yes		
63.1(a)(4)	Yes		Subpart O clarifies the applicability of each paragraph in Subpart A to sources subject to Subpart O.
63.1(a)(5)	No		Reserved.
63.1(a)(6)	Yes		
63.1(a)(7)	Yes		
63.1.1(a)(8)	Yes		
63.1(a)(9)	No		Reserved.
63.1(a)(10)	Yes		
63.1(a)(11)	Yes		§63.366(a) of Subpart O also allows report submissions via fax and on electronic media.
63.1(a)(12)-(14)	Yes		
63.1(b)(1)-(2)	Yes		
63.1(b)(3)	No		§63.367 clarifies the applicability of recordkeeping requirements for sources that determine they are not subject to the emissions standards.
63.1(c)(1)	Yes		Subpart O clarifies the applicability of each paragraph in Subpart A to sources subject to Subpart O in this Table.
63.1(c)(2)	Yes		§63.360(f) exempts area sources subject to this Subpart from the obligation to obtain Title V operating permits.
63.1(c)(3)	No		Reserved.
63.1(c)(4)	Yes		
63.1(c)(5)	No		§63.360 specifies applicability.
63.1(d)	No		Reserved.
63.1(e)	Yes		
63.2	Yes		Additional terms defined in §63.361; when overlap between Subparts A and O occurs, Subpart O takes precedence.

Reference	Applies to sources using 10 tons in Subpart O[a]	Applies to sources using 1 to 10 tons in Subpart O[a]	Comment
63.3	Yes		Other units used in Subpart O are defined in the text of Subpart O.
63.4(a)(1)-(3)	Yes		
63.4(a)(4)	No		Reserved.
63.4(a)(5)	Yes		
63.4(b)	Yes		
63.4(c)	Yes		
63.5(a)	No		§63.366(b)(1) contains applicability requirements for constructed or reconstructed sources.
63.5(b)(1)	Yes	No	
63.5(b)(2)	No		Reserved.
63.5(b)(3)	No		See §63.366(b)(2).
63.5(b)(4)	Yes	No	
63.5(b)(5)	Yes	No	
63.5(b)(6)	Yes	No	
63.5(c)	No		Reserved.
63.5(d)(1)-(2)	No		See §63.366(b)(3).
63.5(d)(3)-(4)	Yes	No	
63.5(e)	Yes	No	
63.5(f)(1)-(2)	No		See §63.366(b)(4).
63.6(a)(1)	Yes		
63.6(a)(2)	No		§63.360 specifies applicability.
63.6(b)-(c)	No		§63.360(g) specifies compliance dates for sources.
63.6(d)	No		Reserved.
63.6(e)	No		Subpart O does not contain any operation and maintenance plan requirements.
63.6(f)(1)	No		§63.362(b) specifies when the standards apply.
63.6(f)(2)(i)	Yes		
63.6(f)(2)(ii)	No		§63.363 specifies parameters for determining compliance.
63.6(f)(2)(iii)-(iv)	Yes		
63.6(f)(2)(v)	No		
63.6(f)(3)	Yes		
63.6(g)	Yes		
63.6(h)	No		Subpart O does not contain any opacity or visible emission standards.
63.6(i)(1)-(14)	Yes		

Reference	Applies to sources using 10 tons in Subpart O*	Applies to sources using 1 to 10 tons in Subpart O*	Comment
63.6(i)(15)	No		Reserved
63.6(i)(16)	Yes		
63.6(j)	Yes		
63.7(a)(1)	Yes		
63.7(a)(2)	Yes		
63.7(a)(3)	Yes		
63.7(b)	Yes		
63.7(c)	Yes	No	
63.7(d)	Yes	No	
63.7(e)	Yes		§63.365 also contains test methods specific to sources subject to the emissions standards.
63.7(f)	Yes		
63.7(g)(1)	Yes		
63.7(g)(2)	No		Reserved
63.7(g)(3)	Yes		
63.7(h)	Yes		
63.8(a)(1)	Yes		
63.8(a)(2)	Yes		
63.8(a)(3)	No		Reserved
63.8(a)(4)	Yes		
63.8(b)(1)	Yes		
63.8(b)(2)	Yes		
63.8(b)(3)	No		
63.8(c)(1) (i)-(ii)	No		A startup, shutdown, and malfunction plan is not required for these standards.
63.8(c)(1)(iii)	Yes		
63.8(c)(2)-(3)	Yes		
63.8(c)(4)-(5)	No		Frequency of monitoring measurements is provided in §63.364; opacity monitors are not required for these standards.
63.8(c)(6)	No		Performance specifications for gas chromatographs and temperature monitors are contained in §63.365.
63.8(c)(7)(i)(A)-(B)	No		Performance specifications for gas chromatographs and temperature monitors are contained in §63.365.
63.8(c)(7)(i)(C)	No		Opacity monitors are not required for these standards.
63.8(c)(7)(ii)	No		Performance specifications for gas chromatographs and temperature monitors are contained in §63.365.
63.8(c)(8)	No		

Reference	Applies to sources using 10 tons in Subpart O[a]	Applies to sources using 1 to 10 tons in Subpart O[a]	Comment
63.8(d)	Yes	No	
63.8(e)(1)	Yes		
63.8(e)(2)	Yes		
63.8(e)(3)	Yes	No	
63.8(e)(4)	Yes		
63.8(e)(5)(i)	Yes		
63.8(e)(5)(ii)	No		Opacity monitors are not required for these standards.
63.8(f)(1)-(5)	Yes		
63.8(f)(6)	No		
63.8(g)(1)	Yes		
63.8(g)(2)	No		
63.8(g)(3)-(5)	Yes		
63.9(a)	Yes		
63.9(b)(1)-(i)	Yes		
63.9(b)(1)(ii)-(iii)	No		§63.366(c)(1)(i) contains language for sources that increase usage such that the source becomes subject to the emissions standards.
63.9(b)(2)-(3)	Yes		§63.366(c)(3) contains additional information to be included in the initial report for existing and new sources.
63.9(b)(4)-(5)	No		§63.366(c)(1)(ii) and (iii) contains requirements for new or reconstructed sources subject to the emissions standards.
63.9(c)	Yes		
63.9(d)	No		
63.9(e)	Yes		
63.9(f)	No		Opacity monitors are not required for these standards.
63.9(g)(1)	Yes		
63.9(g)(2)-(3)	No		Opacity monitors and relative accuracy testing are not required for these standards.
63.9(h)(1)-(3)	Yes		
63.9(h)(4)	No		Reserved.
63.9(h)(5)	No		§63.366(c)(2) instructs sources to submit actual data.
63.9(h)(6)	Yes		
63.9(i)	Yes		
63.9(j)	Yes		
63.10(a)	Yes		

Reference	Applies to sources using 10 tons in Subpart O*	Applies to sources using 1 to 10 tons in Subpart O*	Comment
63.10(b)(1)	Yes		
63.10(b)(2)(i)	No		Not applicable due to batch nature of the industry.
63.10(b)(2)(ii)	Yes		
63.10(b)(2)(iii)	No		
63.10(b)(2)(iv)-(v)	No		A startup, shutdown, and malfunction plan is not required for these standards.
63.10(b)(2)(vi)-(xii)	Yes		
63.10(b)(2)(xiii)	No		
63.10(b)(2)(xiv)	Yes		
63.10(b)(3)	No		§63.367 (b) and (c) contains applicability determination requirements.
63.10(c)(1)	Yes		
63.10(c)(2)-(4)	No		Reserved.
63.10(c)(5)	Yes		
63.10(c)(6)	No		
63.10(c)(7)	No		Not applicable due to batch nature of the industry.
63.10(c)(8)	Yes		
63.10(c)(9)	No		
63.10(c)(10)-(13)	Yes		
63.10(c)(14)	Yes	No	
63.10(c)(15)	No		A startup, shutdown, and malfunction plan is not required for these standards.
63.10(d)(1)	Yes		
63.10(d)(2)	Yes		
63.10(d)(3)	No		Subpart O does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes		
63.10(d)(5)	No		A startup, shutdown, and malfunction plan is not required for these standards.
63.10(e)(1)	Yes		
63.10(e)(2)(i)	Yes		
63.10(e)(2)(ii)	No		Opacity monitors are not required for these standards.
63.10(e)(3)(i)-(iv)	Yes		
63.10(e)(3)(v)	No		§63.366(a)(3) specifies contents and submittal dates for excess emissions and monitoring system performance reports.

Reference	Applies to sources using 10 tons in Subpart O*	Applies to sources using 1 to 10 tons in Subpart O*	Comment
63.10(e)(3)(vi)-(viii)	Yes		
63.10(e)(4)	No		Opacity monitors are not required for these standards.
63.10(f)	Yes		
63.11	Yes		
63.12-63.15	Yes		

b. **40 CFR 63 Subpart A and Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters**

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

Citation	Subject	Applies to Subpart DDDDD
§63.1	Applicability	Yes
§63.2	Definitions	Yes. Additional terms defined in §63.7575
§63.3	Units and Abbreviations	Yes
§63.4	Prohibited Activities and Circumvention	Yes
§63.5	Preconstruction Review and Notification Requirements	Yes
§63.6(a), (b)(1)-(b)(5), (b)(7), (c)	Compliance with Standards and Maintenance Requirements	Yes
§63.6(e)(1)(i)	General duty to minimize emissions.	No. See §63.7500(a)(3) for the general duty requirement.
§63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as practicable.	No
§63.6(e)(3)	Startup, shutdown, and malfunction plan requirements.	No
§63.6(f)(1)	Startup, shutdown, and malfunction exemptions for compliance with non-opacity emission standards.	No
§63.6(f)(2) and (3)	Compliance with non-opacity emission standards.	Yes
§63.6(g)	Use of alternative standards	Yes
§63.6(h)(1)	Startup, shutdown, and malfunction exemptions to opacity standards.	No. See §63.7500(a).
§63.6(h)(2) to (h)(9)	Determining compliance with opacity emission standards	Yes
§63.6(i)	Extension of compliance	Yes. Note: Facilities may also request extension ns of compliance for the installation of combined heat and power, waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this Subpart.
§63.6(j)	Presidential exemption.	Yes
§63.7(a), (b), (c), and (d)	Performance Testing Requirements	Yes

Citation	Subject	Applies to Subpart DDDDD
§63.7(e)(1)	Conditions for conducting performance tests	No. Subpart DDDDD specifies conditions for conducting performance tests at §63.7520(a) to (c).
§63.7(e)(2)-(e)(9), (f), (g), and (h)	Performance Testing Requirements	Yes
§63.8(a) and (b)	Applicability and Conduct of Monitoring	Yes
§63.8(c)(1)	Operation and maintenance of CMS	Yes
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No. See §63.7500(a)(3).
§63.8(c)(1)(ii)	Operation and maintenance of CMS	Yes
§63.8(c)(1)(iii)	Startup, shutdown, and malfunction plans for CMS	No
§63.8(c)(2) to (c)(9)	Operation and maintenance of CMS	Yes
§63.8(d)(1) and (2)	Monitoring Requirements, Quality Control Program	Yes
§63.8(d)(3)	Written procedures for CMS	Yes, except for the last sentence, which refers to a startup, shutdown, and malfunction plan. Startup, shutdown, and malfunction plans are not required.
§63.8(e)	Performance evaluation of a CMS	Yes
§63.8(f)	Use of an alternative monitoring method.	Yes
§63.8(g)	Reduction of monitoring data	Yes
§63.9	Notification Requirements	Yes
§63.10(a), (b)(1)	Recordkeeping and Reporting Requirements	Yes
§63.10(b)(2)(i)	Recordkeeping of occurrence and duration of startups or shutdowns	Yes
§63.10(b)(2)(ii)	Recordkeeping of malfunctions	No. See §63.7555(d)(7) for recordkeeping of occurrence and duration and §63.7555(d)(8) for actions taken during malfunctions.
§63.10(b)(2)(iii)	Maintenance records	Yes
§63.10(b)(2)(iv) and (v)	Actions taken to minimize emissions during startup, shutdown, or malfunction	No
§63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes
§63.10(b)(2)(vii) to (xiv)	Other CMS requirements	Yes

Citation	Subject	Applies to Subpart DDDDD
§63.10(b)(3)	Recordkeeping requirements for applicability determinations	No
§63.10(c)(1) to (9)	Recordkeeping for sources with CMS	Yes
§63.10(c)(10) and (11)	Recording nature and cause of malfunctions, and corrective actions	No. See §63.7555(d)(7) for recordkeeping of occurrence and duration and §63.7555(d)(8) for actions taken during malfunctions.
§63.10(c)(12) and (13)	Recordkeeping for sources with CMS	Yes
§63.10(c)(15)	Use of startup, shutdown, and malfunction plan	No
§63.10(d)(1) and (2)	General reporting requirements	Yes
§63.10(d)(3)	Reporting opacity or visible emission observation results	No
§63.10(d)(4)	Progress reports under an extension of compliance	Yes
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No. See §63.7550(c)(11) for malfunction reporting requirements.
§63.10(e)	Additional reporting requirements for sources with CMS	Yes
§63.10(f)	Waiver of recordkeeping or reporting requirements	Yes
§63.11	Control Device Requirements	No
§63.12	State Authority and Delegation	Yes
§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes
§63.1(a)(5),(a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9).	Reserved	No

3. Compliance Assurance Monitoring (CAM) Requirements

a. CAM Provisions

i. Proper Maintenance

Pursuant to 40 CFR 64.7(b), at all times, the source shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

ii. Continued Operation

Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the source shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The source shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

iii. Response to Excursions or Exceedances

A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion or exceedance, the source shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the source has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

b. Monitoring - Monitoring

Pursuant to 40 CFR 64.7(a), the source shall comply with the monitoring requirements of the CAM Plans as described in 7.3(e) below, pursuant to 40 CFR Part 64 as submitted in the source's CAM plan application.

c. **Monitoring - Recordkeeping**

Pursuant to 40 CFR 64.9(b)(1), the source shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements established for CAM.

d. **Monitoring - Reporting**

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the source shall submit the following reporting requirements:

i. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a CAM report including the following at a minimum:

A. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken pursuant to 40 CFR 64.6(c)(3) and 64.9(a)(2)(i).

B. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with zero and span or calibration checks pursuant to 40 CFR 64.6(c)(3) and 64.9(a)(2)(ii).

e. **CAM Plans**

The following tables contain the CAM Plans in this CAAPP permit:

Table	Emission Unit Section	PSEU Designation	Pollutant
7.3.1	4.1	WBI Sterilization Chamber	VOM
7.3.2	4.2	WBII Sterilization Chamber	VOM

Table 7.3.1 - CAM Plan

Emission Unit Section:	4.1
PSEU Designation:	WBI Sterilization Chamber
Pollutant:	VOM

Indicators:	#1) Recirculation Tank Level #1	#2) Recirculation Tank Level #2
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	Measure height of tank level in Scrubber #1	Measure height of tank level in Scrubber #2
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	<5200 gallons	< 159 inches
Quality Improvement Plan (QIP) Threshold Levels:	System will alarm and shutdown if tank level approaches 5200 gallons	System will alarm and shutdown if tank level approaches 159 inches
Performance Criteria		
The Specifications for Obtaining Representative Data:	Tank levels are taken visually by level gauge on tank.	Tank levels are taken visually by level gauge on tank.
Verification Procedures to Confirm the Operational Status of the Monitoring:	Trained technicians perform inspection.	Trained technicians perform inspection.
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	Routine preventative maintenance on control system.	Routine preventative maintenance on control system.
The Monitoring Frequency:	Tank level settings are controlled and monitored continuously.	Tank level settings are controlled and monitored continuously.
The Data Collection Procedures That Will Be Used:	Maintenance records	Maintenance records
The Data Averaging Period For Determining Whether an Excursion or Exceedance Has Occurred:	Weekly supervision of records	Weekly supervision of records

Table 7.3.2 - CAM Plan

Emission Unit Section:	4.2
PSEU Designation:	WBII Sterilization Chamber
Pollutant:	VOM

Indicators:	#1) Recirculation Tank Level	
General Criteria		
The Monitoring Approach Used to Measure the Indicators:	Measure height of tank level in Scrubber #1	
The Indicator Range Which Provides a Reasonable Assurance of Compliance:	<202 inches	
Quality Improvement Plan (QIP) Threshold Levels:	System will alarm and shutdown if tank level approaches 5200 gallons	
Performance Criteria		
The Specifications for Obtaining Representative Data:	Tank levels are taken visually by level gauge on tank.	
Verification Procedures to Confirm the Operational Status of the Monitoring:	Trained technicians perform inspection.	
Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data:	Routine preventative maintenance on control system.	
The Monitoring Frequency:	Tank level settings are controlled and monitored continuously.	
The Data Collection Procedures That Will Be Used:	Maintenance records	
The Data Averaging Period For Determining Whether an Excursion or Exceedance Has Occurred:	Weekly supervision of records	

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.

Pollutant		*Tons/Year*
Volatile Organic Material	(VOM)	11.14
Sulfur Dioxide	(SO_2)	0.01
Particulate Matter	(PM)	0.22
Nitrogen Oxides	(NO_x)	3.00
HAP, not included in VOM or PM	(HAP)	0.00
	Total	14.37

Attachment 1 - List of Emission Units at This Source

Section	*Emission Units*	*Description*
4.1	Willowbrook I Sterilization Chambers	These are the units at Willowbrook I that house medical equipment that is sterilized with ethylene oxide.
4.2	Willowbrook II Sterilization Chambers	These are the units at Willowbrook II that house medical equipment that is sterilized with ethylene oxide.
4.3	Willowbrook I Aeration Rooms	These units allow the recently sterilized equipment to off-gas and are flushed with fresh air.
4.4	Willowbrook II Aeration Rooms	These units allow the recently sterilized equipment to off-gas and are flushed with fresh air.
4.5	Willowbrook I Boiler #1	The boiler provides process steam to the Willowbrook I facility.
4.6	Willowbrook II Boiler #1 and #2	The boiler provides process steam to the Willowbrook II facility.

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_2	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_2S	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

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_x	Nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PB	Lead
PEMS	Predictive Emissions Monitoring System
PM	Particulate matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	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_2	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

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

Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H))

AUTHORIZED SIGNATURE:

BY: _____ _____

AUTHORIZED SIGNATURE — TITLE OF SIGNATORY

_____ _____/_____/_____

TYPED OR PRINTED NAME OF SIGNATORY — DATE