Sterigenics.

October 1, 2015

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Notification: Chamber 11 – Anticipated Date of Start-Up**
Permit No. 7389-067-0093-S-05-3

Dear Mr. Holder:

As required by our air permit, section 7.8, Sterigenics is providing notification of the anticipated date of start-up of Chamber 11 (SEV-11).

Chamber 11 (SEV-11)
The Atlanta facility anticipates a start-up date for Chamber 11 in early to mid-November 2015, (Condition 7.8-b). An letter of initial start-up will follow when the chamber is placed into production per permit condition 7.8-c.

Please do not hesitate to contact me with questions. You can reach me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

pc:

Kathy Hoffman – Sr. VP, EH&S
Daryl Mosby - Smyrna General Manager
Juan Segovia – VP – EO Operations
Kevin Wagner – Director, EHS

US EPA Region IV
Air and EPCRA Enforcement Branch
61 Forsyth Street
Atlanta, GA 30303

Mr. Michael Odom, Unit Manager
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Mr. Sean Taylor
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Sterigenics International LLC
2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00093

Sterigenics.

September 9, 2015

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Notification: Chamber 11 – Commencement of Construction**
Permit No. 7389-067-0093-S-05-3

Dear Mr. Holder:

As required by our air permit, section 7.8, Sterigenics is providing notification of construction commencement of Chamber 11 (SEV-11).

Chamber 11 (SEV-11)
Construction was started on Chamber 11 on August 1, 2015. (Condition 7.8-a).

The Atlanta facility currently anticipates start-up date for Chamber 11 in late October or early November 2015, (Condition 7.8-b). I will follow-up in a few weeks with an update to provide a more accurate projection.

Please do not hesitate to contact me with questions. You can reach me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

pc:

Kathy Hoffman – Sr. VP, EH&S
Daryl Mosby - Smyrna General Manager
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2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00093

Holder, Don

From: Holder, Don
Sent: Tuesday, January 27, 2015 11:30 AM
To: sreinhardt@sterigenics.com
Subject: 2nd semi-annual report 2014

The Division received the semi-annual report dated January 12, 2015 for your facility for the July through December 2014 reporting period. The report, received on January 26, 2015, appears to satisfy the requirements of Condition 7.7 of Georgia Air Quality Permit 7389-067-0093-S-5-0, as amended, and Condition 6.1.4 of the previous Permit No. 7389-067-0093-S-05-0.

If you have any questions about compliance with your permit, please contact me at 404/362-4846 or by email at: don.holder@dnr.state.ga.us.

AIRS # 067-00093

Sterigenics.

September 9, 2015

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Notification: Chamber 11 – Commencement of Construction**
Permit No. 7389-067-0093-S-05-3

Dear Mr. Holder:

As required by our air permit, section 7.8, Sterigenics is providing notification of construction commencement of Chamber 11 (SEV-11).

Chamber 11 (SEV-11)
Construction was started on Chamber 11 on August 1, 2015. (Condition 7.8-a).

The Atlanta facility currently anticipates start-up date for Chamber 11 in late October or early November 2015, (Condition 7.8-b). I will follow-up in a few weeks with an update to provide a more accurate projection.

Please do not hesitate to contact me with questions. You can reach me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

pc:

Kathy Hoffman – Sr. VP, EH&S
Daryl Mosby - Smyrna General Manager
Juan Segovia – VP – EO Operations
Kevin Wagner – Director, EHS

US EPA Region IV
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61 Forsyth Street
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Stationary Source Compliance Program
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Atlanta, Georgia 30354

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Georgia EPD, Air Protection Branch
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2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00075

X
SSCP

Georgia Department of Natural Resources
Environmental Protection Division • Air Protection Branch
4244 International Parkway • Suite 120 • Atlanta • Georgia 30354
404/363-7000 • Fax: 404/363-7100
Judson H. Turner, Director

AUG 27 2015

Susan M. Reinhardt
EH&S Manager
Sterigenics U.S. LLC
2015 Spring Road, Suite 650
Oak Brook, IL 60523

Re: SM, Application Nos. 23461, 23229, & 22970, Dated August 3, 2015, April 27, 2015 and November 18, 2014
Facility AIRS No. : 067-00093

Dear Ms. Reinhardt:

Enclosed please find Air Quality Permit No. 7389-067-0093-S-05-3 for the installation and operation of a new 30-pallet chamber and vacuum pump (Chamber 11: SEV-11 and CEV-11), the change in ownership and facility address, and the routing of the sterilization chamber back vents to the existing AAT scrubber (EC2) at the Sterigenics facility located in Atlanta, Georgia.

Note that any future modifications that might affect potential emissions from your facility will require review and possible permitting through this office.

The following types of correspondence should be sent to the Division personnel indicated:

- Testing: Ross Winne – Program Manager, Industrial Source Monitoring Program
- Monitoring and Compliance (reports): Sean Taylor - Program Manager, Stationary Source Compliance Program.

Thank you for your cooperation. If you have any questions or need more information, please contact me at (404) 363-7135 or via email at *chan.spraley@dnr.state.ga.us*.

Sincerely,

Chan Spraley

Chan Spraley
Environmental Engineer
Stationary Source Permitting Program

Enclosure

AIRS # 067-00093

Sterigenics.

July 14, 2015

Georgia Department of Natural Resources
Environmental Protection Division
Stationary Source Compliance Program
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

Attention: Ms. Karen Hays, Unit Manager

Subject: Semiannual Synthetic Minor Deviation Report for Sterigenics, U.S., LLC, Atlanta, Georgia Facility Operating **Permit No. 7389-0670093-S-05-0** for the period of January 01, 2015 to June 30, 2015

This letter provides information for the semi-annual Synthetic Minor Permit Deviation Report for Sterigenics, Inc.'s Atlanta, Georgia facility covering the period from January 1, 2015 through June 30, 2015. This report is intended to satisfy the monitoring and reporting requirements of Condition 5.4, 7.4 and 7.7 of Part 70 operating permit number 7389-067-0093-S-05-0. For ease of reference, this report is organized by permit condition.

Semiannual Deviation Reporting Requirements

Condition 5.4 requires:

The Permittee shall maintain and operate the AAT Scrubber System (EC2) to ensure a maximum emission level of 1 ppmv or a reduction of 99% for aeration room vents (AR-1, AR-11 through AR-13) and a reduction efficiency of 99% for sterilization chamber vents (SEV-1- SEV-10):

a. Aeration room vents: AR-1, AR-11 through AR-13 – Once per month the Permittee shall simultaneously collect and record the concentration of a 15-minute ethylene oxide bag sample from both the inlet and outlet of the dry bed absorbers:	
i. Facilities complying with the 1ppmvd standard, as specified in condition No. 2.4, and the concentration of ethylene oxide in the outlet sample of the dry bed absorbers increases to 0.9 ppmv or greater, the Permittee shall replace the dry bed material within 30 days, prior to the next scheduled aeration room exhaust sampling event.	We did not exceed 0.9 ppm or greater in the outlet.
ii. Facilities complying with the 99% reduction efficiency standard, as specified in Condition No. 2.4, and the AAT Scrubber System reduction efficiency decreases to 99.1% or less, the Permittee shall replace the dry bed material within 30 days prior to the next scheduled aeration exhaust sampling event. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed absorbers.	Performance testing conducted on October 24, 2014 indicated efficiency for the AAT scrubber at 99.96%.

AIRS # 067-00093

b. Aeration room vents (AR-1, AR-11 – AR-13) and sterilization chamber vents (SEV-1 through SEV-10) – any instance when sterilization chamber exhausts and aeration room exhausts are simultaneously vented through the AAT Scrubber System, the Permittee shall comply with the 99% reduction efficiency standard. During any such event, the Permittee shall collect and record the concentration of a 15-minute ethylene oxide bag sample from the outlet of the dry bed adsorbers within 96 hours of changeover. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed adsorbers. If the reduction efficiency of the AAT Scrubber System is less than 99.1%, the Permittee shall not route any sterilization replaced. Bag testing shall continue at a sampling frequency of once per week during the changeover of the sterilization chamber vents from the Ceilcote Scrubber (EC3) to the AAT Scrubber System.	N/A
c. When the Permittee is sampling in accordance with Condition Number 5.3a or 5.3b, the ethylene oxide loading to the AAT Scrubber System, the ethylene oxide mass out of the AAT dry adsorbers and the AAT Scrubber System reduction efficiency shall be recorded for each sampling event. These records shall be kept in a form suitable for inspection or submission to the Division. Methods of calculation for these measurements shall be submitted in the site-specific monitoring plan.	N/A
d. The dates of dry bed material placement shall be recorded and kept in a form suitable for inspection or submission to the Division.	N/A

Reporting Requirements

Condition 7.4 For each monthly sampling event conducted in accordance with conditions 5.4.a and 5.4.b, the Permittee shall include the following information in the semi-annual report required by Condition 7.8.

a. AAT Scrubber (EC2): List any occurrence when analysis of the dry bed adsorber outlet sample concentration exceeded 1 ppmv.	N/A Dry Bed Testing is available upon department request
b. For the AAT Scrubber System (EC2), list any occurrence when the AAT Scrubber reduction efficiency indicates that the efficiency is less than 99%.	N/A
c. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the ethylene glycol concentration in the acid-water scrubber liquor is in excess of the maximum ethylene glycol concentration established during initial performance testing.	N/A

d. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the liquor recirculation tank level of the acid-water scrubber is in excess of the maximum liquor tank level established during initial performance testing.	N/A
e. For the acid-water scrubbers (AAT Scrubber System EC2) and Ceilcote Scrubber EC3, any occurrence wh4en the scrubbing liquor pH rises above the manufacturers recommended level of 2.	N/A
f. For the AAT Scrubber System (EC2) list any occurrence when analysis of the dry bed adsorber outlet sample indicates the concentration exceeds 0.9 ppmv, but is less than or equal to 1 ppmv.	N/A
g. For the AAT Scrubber System (EC2), list any occurrence when AAT Scrubber System reduction efficiency indicates the efficiency is less than 99.1%, but is greater than or equal to 99%.	N/A
h. For the AAT Scrubber System, (EC2), list any instance when the AAT Scrubber System breaches a dry bed adsorber material replacement threshold, but he dry bed material is not replace within 30 days.	N/A

Condition 7.7 requires:

The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending January 1 and June 30 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, July 30 and January 30, respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring sources of Air Pollutants and shall contain the following: [391-3-1-.02(6)(b) 1 and 40 CFR 63.10 (e)]

a. A Summary report of excess emissions, exceedances and excursions, and monitor downtime, deviations and monitor downtime in accordance with Section 1.5 (c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

   There were no recordkeeping/ procedural deviations or excess emissions or excursions associated with section 7.7.

b. Total process operating time during each reporting period. Total processing time was:

   4,320 hours (180 days)

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of such occurrence.

   There were no deviations during the period.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

There were no deviations during the period.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

There were no breakdowns of the monitoring system or devices during the reporting period.

f. Certification by a Responsible Official, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

Required Statement

Sterigenics U.S. LLC has reviewed all applicable provisions of the Atlanta Synthetic Minor operating permit.

There have not been deviations from applicable limitations or standards or monitor malfunctions during the reporting period from January 01, 2015 through June 30, 2015.

KA Hoffman — 13-Jul-2015

Kathleen Hoffman
Senior Vice President, Environment, Health and Safety

Date

If you have any questions regarding this submittal, please call me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

cc: Air and EPCRA Enforcement Branch, U.S. EPA Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Kathleen Hoffman, Senior Vice-President- EHS
Juan Segovia – Vice President, Operations
Daryl Mosby – Smyrna, Georgia General Manager
Kevin Wagner, Director EH&S

SMR:cmq

Sterigenics

June 30, 2015

Georgia Department of Natural Resources
Environmental Protection Division
Stationary Source Compliance Program
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

Attention: Ms. Karen Hays, Unit Manager

Subject: Semiannual Synthetic Minor Deviation Report for Sterigenics, U.S., LLC, Atlanta, Georgia Facility Operating **Permit No. 7389-0670093-S-05-0** for the period of January 01, 2015 to June 30, 2015

This letter provides information for the semi-annual Synthetic Minor Permit Deviation Report for Sterigenics, Inc.'s Atlanta, Georgia facility covering the period from January 1, 2015 through June 30, 2015. This report is intended to satisfy the monitoring and reporting requirements of Condition 5.4, 7.4 and 7.7 of Part 70 operating permit number 7389-067-0093-S-05-0. For ease of reference, this report is organized by permit condition.

Semiannual Deviation Reporting Requirements

Condition 5.4 requires:

The Permittee shall maintain and operate the AAT Scrubber System (EC2) to ensure a maximum emission level of 1 ppmv or a reduction of 99% for aeration room vents (AR-1, AR-11 through AR-13) and a reduction efficiency of 99% for sterilization chamber vents (SEV-1- SEV-10):

a. Aeration room vents: AR-1, AR-11 through AR-13 – Once per month the Permittee shall simultaneously collect and record the concentration of a 15-minute ethylene oxide bag sample from both the inlet and outlet of the dry bed absorbers:	
i. Facilities complying with the 1ppmvd standard, as specified in condition No. 2.4, and the concentration of ethylene oxide in the outlet sample of the dry bed absorbers increases to 0.9 ppmv or greater, the Permittee shall replace the dry bed material within 30 days, prior to the next scheduled aeration room exhaust sampling event.	We did not exceed 0.9 ppm or greater in the outlet.
ii. Facilities complying with the 99% reduction efficiency standard, as specified in Condition No. 2.4, and the AAT Scrubber System reduction efficiency decreases to 99.1% or less, the Permittee shall replace the dry bed material within 30 days prior to the next scheduled aeration exhaust sampling event. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed absorbers.	Performance testing conducted on October 24, 2014 indicated efficiency for the AAT scrubber at 99.96%.

b. Aeration room vents (AR-1, AR-11 – AR-13) and sterilization chamber vents (SEV-1 through SEV-10) – any instance when sterilization chamber exhausts and aeration room exhausts are simultaneously vented through the AAT Scrubber System, the Permittee shall comply with the 99% reduction efficiency standard. During any such event, the Permittee shall collect and record the concentration of a 15-minute ethylene oxide bag sample from the outlet of the dry bed adsorbers within 96 hours of changeover. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed adsorbers. If the reduction efficiency of the AAT Scrubber System is less than 99.1%, the Permittee shall not route any sterilization replaced. Bag testing shall continue at a sampling frequency of once per week during the changeover of the sterilization chamber vents from the Ceilcote Scrubber (EC3) to the AAT Scrubber System.	N/A
c. When the Permittee is sampling in accordance with Condition Number 5.3a or 5.3b, the ethylene oxide loading to the AAT Scrubber System, the ethylene oxide mass out of the AAT dry adsorbers and the AAT Scrubber System reduction efficiency shall be recorded for each sampling event. These records shall be kept in a form suitable for inspection or submission to the Division. Methods of calculation for these measurements shall be submitted in the site-specific monitoring plan.	N/A
d. The dates of dry bed material placement shall be recorded and kept in a form suitable for inspection or submission to the Division.	N/A

Reporting Requirements

Condition 7.4 For each monthly sampling event conducted in accordance with conditions 5.4.a and 5.4.b, the Permittee shall include the following information in the semi-annual report required by Condition 7.8.

a. AAT Scrubber (EC2): List any occurrence when analysis of the dry bed adsorber outlet sample concentration exceeded 1 ppmv.	N/A Dry Bed Testing is available upon department request
b. For the AAT Scrubber System (EC2), list any occurrence when the AAT Scrubber reduction efficiency indicates that the efficiency is less than 99%.	N/A
c. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the ethylene glycol concentration in the acid-water scrubber liquor is in excess of the maximum ethylene glycol concentration established during initial performance testing.	N/A

d. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the liquor recirculation tank level of the acid-water scrubber is in excess of the maximum liquor tank level established during initial performance testing.	N/A
e. For the acid-water scrubbers (AAT Scrubber System EC2) and Ceilcote Scrubber EC3, any occurrence wh4en the scrubbing liquor pH rises above the manufacturers recommended level of 2.	N/A
f. For the AAT Scrubber System (EC2) list any occurrence when analysis of the dry bed adsorber outlet sample indicates the concentration exceeds 0.9 ppmv, but is less than or equal to 1 ppmv.	N/A
g. For the AAT Scrubber System (EC2), list any occurrence when AAT Scrubber System reduction efficiency indicates the efficiency is less than 99.1%, but is greater than or equal to 99%.	N/A
h. For the AAT Scrubber System, (EC2), list any instance when the AAT Scrubber System breaches a dry bed adsorber material replacement threshold, but he dry bed material is not replace within 30 days.	N/A

7.7 requires:

The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending January 1 and June 30 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, July 30 and January 30, respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring sources of Air Pollutants and shall contain the following: [391-3-1-.02(6)(b) 1 and 40 CFR 63.10 (e)]

a. A Summary report of excess emissions, exceedances and excursions, and monitor downtime, deviations and monitor downtime in accordance with Section 1.5 (c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

   There were no recordkeeping/ procedural deviations or excess emissions or excursions associated with section 7.7.

b. Total process operating time during each reporting period. Total processing time was:

   4,344 hours (181 days)

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of such occurrence.

   There were no deviations during the period.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

There were no deviations during the period.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

There were no breakdowns of the monitoring system or devices during the reporting period.

f. Certification by a Responsible Official, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

Required Statement

Sterigenics U.S. LLC has reviewed all applicable provisions of the Atlanta Synthetic Minor operating permit.

There have not been deviations from applicable limitations or standards or monitor malfunctions during the reporting period from January 01, 2015 through June 30, 2015.

Daryl Mosby
General Manager

06 Jul 2015
Date

If you have any questions regarding this submittal, please call me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt
Manager
Environment, Health and Safety

cc: Air and EPCRA Enforcement Branch, U.S. EPA Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Kathleen Hoffman, Senior Vice-President- EHS
Juan Segovia – Vice President, Operations
Daryl Mosby – Smyrna, Georgia General Manager
Kevin Wagner, Director EH&S

Holder, Don

From: Holder, Don
Sent: Thursday, July 23, 2015 10:01 AM
To: sreinhardt@sterigenics.com
Subject: 1st semi-annual report 2015

The Division received the semi-annual report dated July 14, 2015 for your facility for the January through June 2015 reporting period. The report, received on July 16, 2015, appears to satisfy the requirements of Condition 7.7 of Georgia Air Quality Permit 7389-067-0093-S-5-0, as amended.

If you have any questions about compliance with your permit, please contact me at 404/362-4846 or by email at: don.holder@dnr.state.ga.us.

Sincerely,

Don Holder
Principal Environmental Engineer
Stationary Source Compliance Program

AIRS # 067-00093

Georgia Department of Natural Resources
Environmental Protection Division • Air Protection Branch
4244 International Parkway • Suite 120 • Atlanta • Georgia 30354
404/363-7000 • Fax: 404/363-7100
Judson H. Turner, Director

Compliance Monitoring Report

1. General Information

Date of Inspection:	June 25, 2015
Date of Report Completed:	July 2, 2015
Compliance Monitoring Category:	Unannounced Inspection
Inspector Name:	Don Holder DH
Reviewing Manager:	Michael Odom MO

2. Facility Information

Facility Name:	Sterigenics U.S. LLC
Facility AIRS No.:	067-00093
Facility Location:	2973 Olympic Industrial Park Smyrna, Georgia, 30080, Cobb County
Facility Mailing Address:	2015 Spring Road, Suite 650 Oak Brook, Illinois 60523
Facility Contact:	Darayl Mosby, General Manager 404-355-4485 [email]
CMS Designation:	Synthetic Minor Source

Air Quality Permit No. 7389-067-0093-S-01-0 **Effective Date: May 27, 2014**

Issued for the operation of an ethylene oxide and propylene oxide sterilization facility. The Permit is also for the installation and operation of a 30-pallet sterilization chamber and an aeration room.

Air Quality Permit Amendment No. 7389-067-0093-S-01-1 **Effective Date: November 17, 2014**

Issued for change of address from Smyrna to Atlanta.

Air Quality Permit Amendment No. 7389-067-0093-S-01-2 **Effective Date: April 1, 2015**

Issued for the installation and operation of a new 30-pallet chamber and vacuum pump.

Permit(s) can be accessed at www.georgiaair.org

3. Inspection Summary / Recommended Actions:

The facility appeared to be in compliance with the permit at the time of the inspection. Facility issued a new Synthetic Minor permit on April 1, 2015.

4. Previous Enforcement Actions and Inspections:

There have been no enforcement actions for this facility during the previous five years. See attached Full Compliance Evaluation (FCE) Report for details.

5. Complaint Investigations since last Full Compliance Evaluation:

There have been no complaints received for this facility during the previous five years. See Complaint Tracking System (CTS) for further details.

6. Applicable Requirements, Description of Regulated Emission Units, and Inspection Determinations:

Table 6

Emission Units		Corresponding Permit Conditions	Air Pollution Control Devices		Inspection	
ID No.	Description		ID No.	Description	Evaluated During Inspection?	Inspection Determination
SEV-1	Six-pallet Sterilization Chamber 1 vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-2	Six-pallet Sterilization Chamber 2 vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-3	Nine-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-4	Five-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-5	Thirteen-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.

Table 6						
Emission Units		Corresponding Permit Conditions	Air Pollution Control Devices		Inspection	
ID No.	Description		ID No.	Description	Evaluated During Inspection?	Inspection Determination
SEV-6	Thirteen-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-7	Thirteen-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-8	Thirteen-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
SEV-9	Fifteen-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	Out of commission. To be removed from service..
SEV-10	Thirty-pallet Sterilization Chamber vacuum pump	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.3	EC2 EC3	AAT Scrubber System (with Dry Bed Adsorber) Ceilcote Scrubber	Yes	No issues noted.
CEV-1	Back vent for Chamber 1	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-2	Back vent for Chamber 2	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-3	Back vent for Chamber 3	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-4	Back vent for Chamber 4	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-5	Back vent for Chamber 5	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-6	Back vent for Chamber 6	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-7	Back vent for Chamber 7	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-8	Back vent for Chamber 8	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
CEV-9	Back vent for Chamber 9	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--

Table 6						
Emission Units		Corresponding Permit Conditions	Air Pollution Control Devices		Inspection	
ID No.	Description		ID No.	Description	Evaluated During Inspection?	Inspection Determination
CEV-10	Back vent for Chamber 10	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 3.1, 4.1, 4.2, 4.3	NA	None	No	--
AR-11	Aeration Room 11	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.4, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2	AAT Scrubber System (with Dry Bed Adsorber)	Yes	No issues noted.
AR-12	Aeration Room 12	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.4, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2	AAT Scrubber System (with Dry Bed Adsorber)	Yes	No issues noted.
AR-13	Aeration Room 13	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.4, 6.1, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 8.1, 8.2, 8.3	EC2	AAT Scrubber System (with Dry Bed Adsorber)	Yes	No issues noted.
AR-1	Aeration Room 1	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 4.1, 4.2, 4.3, 5.1, 5.4, 6.1, 6.3, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1, 8.2, 8.3	EC2	AAT Scrubber System (with Dry Bed Adsorber)	Yes	No issues noted.

7. Compliance Monitoring Activities – Details not included in table above:

a. Describe any deviation from compliance noted during the inspection listed on Table 6:

No deviations noted.

b. Describe any compliance assistance provided during inspection:

No compliance assistance was required.

c. Describe any action taken by the facility to come back into compliance during the inspection:

None.

d. Deviations noted during the inspection, not previously listed. Include equipment ID or equipment description and condition number:

No deviations noted during the inspection.

8. Additional Permit Requirements:

a. Periodic Reports:
All semi-annual reports submitted as required.
See attached Full Compliance Evaluation (FCE) Report for details.

b. Permit Fees:
All fees paid as required.
See attached Full Compliance Evaluation (FCE) Report for details.

c. Permit Renewal and Expiration:
Not Applicable.

d. For any overall emission/production/usage limit:

Table 8.d.

Permit Condition	Permit Limit	Actual
2.1, 2.2, 2.3, 2.4	Meet requirements of Ethylene Oxide Emission Standards for Sterilization Facilities. Reduce emissions from each Sterilization Vent by 99%. Reduce emissions from each Aeration Vent to 1 ppm or by 99%, whichever is less stringent.	Last tested on October 23, 2014 following new chamber installation. EC-2 efficiency – 99/95% EC-3 efficiency – 99.993%
2.6	Fire only natural gas in all fuel burning units.	Facility only uses natural gas.

9. Attachments:

a. Inspection Observations:
See attachment

b. Performance Tests:
See attachment or not applicable

c. Full Compliance Evaluation (FCE) Report:
See attachment

Attachment: Inspection Observations

Fugitive Emissions

Permit Condition	Permit Limit	Observation
3.1	Minimize fugitive emissions.	None observed.

Process & Control Equipment

Permit Condition	Permit Limit	Observation
4.1	Conduct routine maintenance as needed. Maintain maintenance records.	Preventive maintenance program in place. Results maintained on file.
4.2	A spare parts inventory for control equipment shall be maintained.	Spare parts for control systems maintained on site.
4.3	Implement repairs to control equipment as expeditiously as possible.	Repairs conducted within minimal times.

Monitoring

Permit Condition	Monitoring Requirement	Observation
5.1	All monitoring systems shall be in continuous operation. Maintenance and repair shall be conducted to minimize periods of non-service.	All monitors in place and operational.
5.2, 5.3	For the AAT Scrubber (Source Code EC2) and the Ceilcote Scrubber (Source Code EC3) install and maintain monitoring devices for the measurement of scrubber liquor level in the recirculation tank (a liquid level indicator) and the pH of the scrubber liquor for each of the scrubbers. Maintain the level of the scrubber liquor at or below the levels established during the initial performance testing. The pH levels of the scrubber liquor shall be maintained in accordance with the pH levels recommended by the manufacturers. Measurements shall be made weekly.	All data on file. All monitoring devices in place and operational. pH levels below 2. Tank levels on EC-2 at maximum levels – facility has reduced levels by 5% for buffer with operating limits established during testing.

5.4	Maintain and operate the AAT Scrubber System (Source Code: EC2) to ensure a maximum emission level of 1 ppmv or a reduction of 99% for aeration room vents (Source Codes: AR-1, AR-11 through AR-13) and a reduction efficiency of 99% for sterilization chamber vents (Source Codes SEV-1 through SEV-10).	
	a. For Source Codes AR-1, AR-11 through AR-13, collect and record the concentrations of a 15-minute ethylene oxide bag sample from both the inlet and the outlet of the dry bed adsorber monthly. i. When complying with the 1 ppmvd standard, if the concentration of ethylene oxide in the outlet sample of the dry bed adsorbers increases to 0.9 ppmv or greater, replace the dry bed material within 30 days. ii. When complying with the 99% reduction efficiency standard, if the AAT Scrubber System reduction efficiency decreases to 99.1% or less, replace the dry bed material within 30 days. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed adsorbers.	Monthly bag sampling conducted all results on file. All exhaust gasses at 100% reduction.
	b. For Source Codes AR-1, AR-11 through AR-13 and Source Codes SEV-1 through SEV- 10, when sterilization chamber exhausts and aeration room exhausts are simultaneously vented through the AAT Scrubber System, comply with the 99% reduction efficiency standard. Collect and record the concentration of a 15-minute ethylene oxide bag sample from the outlet of the dry bed adsorbers within 96 hours of the changeover. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed adsorbers. If the reduction efficiency for the AAT Scrubber System is less than 99.1%, the	Facility has not operated in this manner.

	Permittee shall not route any sterilization chamber exhausts through the AAT Scrubber System until the dry bed material has been replaced. Bag testing shall continue at a sampling frequency of once per week during the changeover of the sterilization chamber vents from the Ceilcote Scrubber (Source Code: EC3) to the AAT Scrubber System.	
	c. For a and b above, the AAT Scrubber System reduction efficiency shall be recorded for each sampling event.	Reduction efficiency recorded with each sampling event.
	d. The dates of dry bed material replacement shall be recorded and maintained on file.	Dry beds last replaced on August 15, 2014.

Notification, Reporting and Record Keeping

Permit Condition	Permit Limit	Observation
7.1	Maintain records of any startup, shutdown, or malfunction, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative. Retain records for a period of five years.	All records on file as required.
7.2	Maintain a file of all measurements required by this permit, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection for five years.	All records on file as required.
7.3	Maintain general records and CMS records as specified by 40 CFR 63.10(b)(2) and (c), respectively, and Table 1 of 40 CFR 63 Subpart O.	All records on file as required.

7.4	Include the following information in the semiannual report. a. For the AAT Scrubber System (Source Code EC2), any occurrence when analysis of the dry bed adsorber outlet sample indicates that the concentration exceeds 1 ppmv. b. For the AAT Scrubber System (Source Code EC2), any occurrence when AAT Scrubber System reduction efficiency indicates that the efficiency is less than 99%. c. For the acid-water scrubbers [AAT Scrubber System (Source Code EC2) and Ceilcote Scrubber (Source Code EC3)], any occurrence when the ethylene glycol concentration in the acid-water scrubber liquor is in excess of the maximum ethylene glycol concentration established during initial performance testing. d. For the acid-water scrubbers [AAT Scrubber System (Source Code EC2) and Ceilcote Scrubber (Source Code EC3)], any occurrence when the liquor recirculation tank level of the acid-water scrubber is in excess of the maximum liquor tank level established during initial performance testing. e. For the acid-water scrubbers [AAT Scrubber System (Source Code EC2) and Ceilcote Scrubber (Source Code EC3)], any occurrence when the scrubbing liquor pH rises above the manufacturers' recommended level of 2. f. For the AAT Scrubber System (Source Code EC2), any occurrence when analysis of the dry bed adsorber outlet sample indicates that the concentration exceeds 0.9 ppmv, but is less than or equal to 1 ppmv. g. For the AAT Scrubber System (Source Code EC2), any occurrence when AAT Scrubber System reduction efficiency	No violations reported for operations.

	indicates that the efficiency is less than 99.1%, but is greater than or equal to 99%. h. For the AAT Scrubber System (Source Code EC2), any instance when the AAT Scrubber System breaches a dry bed adsorber material replacement threshold, but the dry bed material is not replaced within 30 days.	
7.5	Submit the following reports for Sterilization Chamber SEV-10 and Aeration Room AR-1: a. A notification of the date when construction commenced, not later than 30 days after such date. b. A notification of the anticipated date of startup, not more than 60 days nor less than 30 days before such date; and c. A notification of the actual date of initial startup, within 15 calendar days after that date.	Construction completed
7.6	Submit the following reports as per Subpart O: a. Deviation reports; and b. Continuous Monitoring System performance and summary reports	All reports submitted as required.

Attachment: Performance Tests

Previous test results

Source Tested	Pollutant	Date of Test	Required Testing Frequency	Limit	Actual	Percent of Allowable
Sterilization Chamber SEV-10 Scrubber EC-2	EtO	October 23, 2014	Upon startup	99% DRE	99.95% DRE	N/A
Aeration Chamber AR-1 Scrubber EC-3	EtO	October 23, 2014	Upon startup	99% DRE	99.993% DRE	N/A

Georgia Department of Natural Resources

Environmental Protection Division · Air Protection Branch
4244 International Parkway · Suite 120 · Atlanta · Georgia 30354
Telephone: 404/363-7000 · Fax: 404/363-7100
Judson H. Turner, Director

Full Compliance Evaluation (FCE) Report

Fiscal Year Ending:	Sep 30, 2015
Facility AIRS Number:	06700093
Facility Name:	Sterigenics U.S. LLC
Facility Address:	2973 Olympic Industrial Drive
Compliance Engineer:	Don Holder
Unit:	Air Toxics

SIP Subject

MACT 63 Subject

Title V Subject

Final Compliance Status

Date Full Compliance Evaluation Completed: 02-Jul-2015

Comments: In compliance

Inspection(s)

GA EPD Tracking Number: 57862
Staff Responsible: Holder, Don
Inspection Date: 25-Jun-2015
Reason for Inspection: Planned Unannounced
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 47683
Staff Responsible: Holder, Don
Inspection Date: 11-Apr-2013
Reason for Inspection: Planned Unannounced
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 38826
Staff Responsible: Holder, Don
Inspection Date: 22-Jun-2011
Reason for Inspection: Planned Unannounced
Follow Up Action Taken: No
Comments:
In compliance.

Performance Test(s) - 5 year history if available

GA EPD Reference Number: 201500164
Date Test Performed: 10/23/2014
Follow Up Action Taken: No
SSCP Comments:
In compliance. Re-establish scrubber flow rate at 1537 gpm and storage tank level of 108"

Test Type: SOURCE TEST - Memorandum (Standard)
Emission Source: Areation Room/Advanced Air Technologies (AAT) emission control system

Full Compliance Evaluation (FCE) Report

Fiscal Year Ending: Sep 30, 2015
Facility AIRS Number: 06700093
Facility Name: Sterigenics U.S. LLC
Facility Address: 2973 Olympic Industrial Drive
Compliance Engineer: Don Holder
Unit: Air Toxics

Pollutant: Ethylene Oxide
ISMP Test Status: In Compliance
ISMP Comments:
N/A

GA EPD Reference Number: 201500030
Date Test Performed: 10/23/2014
Follow Up Action Taken: No
SSCP Comments:
In compliance. Re-establish scrubber flow rate of 155 gpm and storage tank level of 185"

Test Type: SOURCE TEST - PTE (Perminate Total Enclosure)
Emission Source: 10-Sterilizer Chambers/Ceilcote Scrubber
Pollutant: Ethylene Oxide
ISMP Test Status: In Compliance
ISMP Comments:
N/A

Report(s)

GA EPD Tracking Number: 57863
Type of Report: First Semiannual
Date Report Received: 08-Jul-2014
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 55176
Type of Report: Second Semiannual
Date Report Received: 26-Jan-2015
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 50191
Type of Report: Second Semiannual
Date Report Received: 08-Jan-2014
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 46451
Type of Report: Second Semiannual
Date Report Received: 14-Jan-2013
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 42065
Type of Report: Second Semiannual
Date Report Received: 25-Jan-2012
Follow Up Action Taken: No

Comments:
In compliance.

GA EPD Tracking Number: 48455
Type of Report: First Semiannual
Date Report Received: 09-Jul-2013
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 44476
Type of Report: First Semiannual
Date Report Received: 18-Jul-2012
Follow Up Action Taken: No
Comments:
In compliance.

GA EPD Tracking Number: 39323
Type of Report: First Semiannual
Date Report Received: 01-Aug-2011
Follow Up Action Taken: No
Comments:
In compliance.

Title V Annual Certification(s)

GA EPD Tracking Number: 57266
Date Received: 11-Feb-2014
Date Report Completed: 29-Apr-2015
Follow Up Action Taken: No
Comments:
N/A

GA EPD Tracking Number: 55755
Date Received: 29-Jan-2015
Date Report Completed: 19-Feb-2015
Follow Up Action Taken: No
Comments:
In compliance.

Fees Data - 5 year history if available

Fee Year: 2013
Payment Stutus: Paid in Full
IAIP Status: Paid in Full
Invoiced Amount: $4,500.00
Payment Amount: $4,500.00

Fee Year: 2012
Payment Stutus: Paid in Full
IAIP Status: Paid in Full
Invoiced Amount: $4,500.00
Payment Amount: $4,500.00

Full Compliance Evaluation (FCE) Report

Fiscal Year Ending:	Sep 30, 2015
Facility AIRS Number:	06700093
Facility Name:	Sterigenics U.S. LLC
Facility Address:	2973 Olympic Industrial Drive
Compliance Engineer:	Don Holder
Unit:	Air Toxics

Fee Year: 2011
Payment Stutus: Paid in Full
IAIP Status: Paid in Full
Invoiced Amount: $4,100.00
Payment Amount: $4,100.00

Fee Year: 2010
Payment Stutus: Paid in Full
IAIP Status: Paid in Full
Invoiced Amount: $4,161.50
Payment Amount: $4,161.50

Sterigenics.

April 27, 2015

Mr. Chan Spraley
Environmental Engineer
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Address modification to the Air Quality Permit for Sterigenics, Atlanta Facility Permit No. 7389-067-0093-S-05-2, AIRS Number 067-00093**

Dear Mr. Spraley:

Thank you very much for the recent amendment to the Atlanta, Georgia air quality permit. We have been informed the facility address has changed to: 2971 Olympic Industrial Drive SE, Suite 116, Atlanta, Georgia 30339 and request this address modification be applied to our Air Quality Permit.

If you have any questions regarding this request, please call me at (630) 928-1768.

Sincerely,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

Copy: Daryl Mosby, Atlanta, Georgia General Manager
Kevin Wagner, Director EHS

Mr. Ross Winne
Program Manager
Air Protection Branch
Industrial Source Monitoring Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Mr. Michael Odom
Unit Manager
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

SMR:cmq

Sterigenics International LLC
2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS #067-00093

Georgia Department of Natural Resources
Environmental Protection Division · Air Protection Branch
4244 International Parkway · Suite 120 · Atlanta · Georgia 30354
Telephone: 404/363-7000 · Fax: 404/363-7100
Judson H. Turner, Director

FEB 17 2015

MEMORANDUM:

TO: Sean Taylor
THROUGH: Ross Winne, Richard Taylor
FROM: Anna Gray
SUBJECT: SOURCE TEST REPORT REVIEW

The following test has been reviewed and was conducted in an acceptable fashion for the purpose intended.

COMPANY NAME	Sterigenics U.S. LLC
COMPANY LOCATION	Smyrna, GA
SOURCE TESTED	Areation Room/Advanced Air Technologies (AAT) emission control system
POLLUTANT DETERMINED	Ethylene Oxide
REPORT REVIEWED BY	Anna Gray
TEST WITNESSED BY	Anna Gray
DATE(S) OF TEST	October 23, 2014 to October 24, 2014
DATE RECEIVED BY APB	January 8, 2015
APPLICABLE REGULATION	Permit No. 7389-067-0093-S-05-0, Conditions 2.3, 6.2 and 6.3
MEMORANDUM	The reduction efficiency test of the Two stage Advanced Air Technologies (AAT) emission control system, which controls the emissions from the aeration room, was conducted in accordance o USEPA CFR 40, Part 63.365. The emissions reduction should be at least 99%. Average EtO concentration on inlet= 27.94 ppm Average EtO concentration on outlett= 0.0122 ppm Average EtO Control Efficiency: 99.95% Aeration time on each run: 60 min Average flow on the outlet: 9831 dscfm EtO average mass flow on the outlet: 0.000824 lbs/hr The inlet flow was assumed the same as the outlet. Each test run was performed with freshly sterilized product in the aeration chambers. Parameters during test: Scrubber flow rate= 1537 gpm; 0.9 pH; Storage tank level for the scrubber: 108"; Glycol concentration=30.4%

cc: Ross Winne
Reference Number: 201500164

AIRS Number: 06700093
Printed: 2/17/2015

FEB 17 2015

Georgia Department of Natural Resources
Environmental Protection Division · Air Protection Branch
4244 International Parkway · Suite 120 · Atlanta · Georgia 30354
Telephone: 404/363-7000 · Fax: 404/363-7100
Judson H. Turner, Director

MEMORANDUM:

TO: Sean Taylor
THROUGH: Ross Winne, Richard Taylor
FROM: Anna Gray
SUBJECT: SOURCE TEST REPORT REVIEW

The following test has been reviewed and was conducted in an acceptable fashion for the purpose intended.

COMPANY NAME	Sterigenics U.S. LLC
COMPANY LOCATION	Smyrna, GA
SOURCE TESTED	10-Sterilizer Chambers/Ceilcote Scrubber
POLLUTANT DETERMINED	Ethylene Oxide
REPORT REVIEWED BY	Anna Gray
TEST WITNESSED BY	Anna Gray
DATE(S) OF TEST	October 23, 2014
DATE RECEIVED BY APB	January 8, 2015
APPLICABLE REGULATION	Permit No. 7389-067-0093-S-05-0, Conditions 2.3, 6.2 and 6.3
MAXIMUM EXPECTED OPERATING CAPACITY	12,000 ACFM
OPERATING CAPACITY	N/A
ALLOWABLE EMISSION RATE	99 % DRE
CONTROL EQUIPMENT AND MONITORING DATA	Scrubber flow rate= 155 gpm; 1.7 pH; Storage tank level for the scrubber: 185"; Glycol concentration=35.7%

cc: Ross Winne
Reference Number: 201500030

AIRS Number: 06700093
Printed: 2/17/2015

Georgia Department of Natural Resources
Environmental Protection Division · Air Protection Branch
4244 International Parkway · Suite 120 · Atlanta · Georgia 30354
Telephone: 404/363-7000 · Fax: 404/363-7100
Judson H. Turner, Director

MEMORANDUM

The reduction efficiency test of the Ceilcote packed tower scrubber emission control system was conducted in accordance o USEPA CFR 40, Part 63.365. At least one of the test runs was performed using emissions from the new30-pallet sterilizer.

Run #1 Inlet EtO= 27.4 lbs
Outlet EtO= 0.0010212 lbs
EtO Control Efficiency= 99.996%
Minutes/cycle= 22

Run #2 Inlet EtO=61.0 lbs
Outlet EtO= 0.0041159 lbs
EtO Control Efficiency= 99.993%
Minutes/cycle= 23

Run #3 Inlet EtO= 218.1 lbs
Outlet EtO= 0.0189873 lbs
EtO Control Efficiency= 99.991%
Minutes/cycle= 27
Average EtO Control Efficiency: 99.993%

The amount of ethylene oxide used during each sterilization cycle was calculated by the Gas law and the conditions at the beginning and the end of every exhaust phase. All exhaust phase testing wsa conducted during normal process load conditions, but with an empty sterilization chamber to facilitate inlet mass calculation and the performance of multiple test runs.

cc: Ross Winne
Reference Number: 201500030

AIRS Number: 06700093
Printed: 2/17/2015

Holder, Don

From: Holder, Don
Sent: Thursday, February 19, 2015 10:39 AM
To: sreinhardt@sterigenics.com
Subject: 2014 ACC submittal

The Division received the 2014 Title V Annual Compliance Certification for your facility on January 29, 2015 for the period of January 1, 2014 through May 26, 2014. The submittal correctly reported the compliance status of all terms and conditions of the permit. This is consistent with the information available to the Division. The submittal appears to comply with the requirements of Condition 8.14.1 of Georgia Air Quality Permit No. 7389-067-0093-V-04-0 as issued on November 14, 2013, as amended.

Thank you for your cooperation in this matter. If you have any questions or comments concerning this letter or your air quality permit, please contact me at 404/362-4846 or by email at: don_holder@dnr.state.ga.us .

AIRS # 067-00093

Sterigenics.

January 22, 2015

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Annual Title V Compliance Certification for Sterigenics, Smyrna Facility – Part 70 Operating Permit No. 7389-067-0093-V-04-0**
AIRS Number 04-13-067-00093

Dear Mr. Holder:

Enclosed please find the Title V Annual Compliance Certification in place for our Smyrna facility for the first five months of 2014. All of the sections within this report have been reviewed and have been in continuous compliance with the exception of a late report filing in 2014.

If you have any questions regarding this submittal, please call me at (630) 928-1768.

Sincerely,

Susan M. Reinhardt
Manager
Environment, Health and Safety

Attachment: Annual 2014 Title V Compliance Certification

pc: Kathy Hoffman – Senior VP, EHS
Daryl Mosby - Smyrna General Manager
Kevin Wagner – Director, EHS

US EPA Region IV
Air and EPCRA Enforcement Branch61 Forsyth Street
Atlanta, GA 30303

Sterigenics International LLC
2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00093

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Environmental Protection Division
Air Protection Branch

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Fax: (404) 363-7100

TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 1 – FACILITY INFORMATION AND CERTIFICATION

FACILITY INFORMATION					
Period Covered By Report:	1-1-14 to 5-26-14				
Facility Name:	Sterigenics U.S., LLC	AIRS Number:	04-13-067-00093		
Facility Physical Address:	2973 Olympic Industrial Drive				
City:	Smyrna	State:	GA	ZIP Code:	30080
Facility Mailing Address:	2973 Olympic Industrial Drive				
City:	Smyrna	State:	GA	ZIP Code:	30080
Responsible Official:	Kathleen Hoffman	Phone:	630-928-1758	FAX:	630-928-1701
Environmental Contact:	Susan M. Reinhardt	Phone:	630-928-1768	FAX:	630-928-1701
Permit and Amendment Number(s):	7389-067-0093-V-04-0	Permit and Amendment Effective Date(s):	V-04-0 5-19-2010 to 05-26-2014		

TRUTH, ACCURACY, AND COMPLETENESS CERTIFICATION BY RESPONSIBLE OFFICIAL			
I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached annual compliance certification are true, accurate, and complete.			
Signature:	KA Hoffman	Date:	23-Jan-2015
Responsible Official Title:	Senior Vice-President EHS		

Number of Attached Pages:	9

For the purposes of this form, the term "deviation" includes any excess emissions, exceedance, or excursion identified in the permit or any non-compliance with any term or condition of the Title V Operating Permit including those attributable to equipment malfunction, breakdown, or upset condition. The acknowledgement of deviations from the specific permit requirements is not necessarily an acknowledgement of a violation. However, failure to report any and all deviations may constitute a violation of the Title V Operating Permit.

The Title V Annual Compliance Certification must be submitted to both the Georgia EPD and US EPA Region IV.

Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, GA 30354

US EPA Region IV
Air and EPCRA Enforcement Branch
61 Forsyth Street
Atlanta, GA 30303

State of Georgia
Department of Natural Resources
Environmental Protection Division
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TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 3.3.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 3.3.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	ST	----	----	0
V-04-0 3.3.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 3.3.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 3.3.5	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 4.1.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 4.1.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 4.1.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 5.1.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 5.2.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 5.2.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 5.2.3a	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0
V-04-0 5.2.3b	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	----	----	0

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Monitoring Method Abbreviations: RR = Record keeping Requirement; ST = Source Testing; CEMS = Continuous Emissions Monitoring System; COMS = Continuous Opacity Monitoring System; CFM = Continuous Fuel Monitoring; VE = Visible Emissions Monitoring; PEMS = Predictive Emissions Monitoring System; CERMS = Continuous Emission Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 5.2.3c	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 5.2.3d	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.5	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.6	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.1.7	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.2.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.2.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 6.2.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

Monitoring Method Abbreviations: RR = Record keeping Requirement; ST = Source Testing; CEMS = Continuous Emissions Monitoring System; COMS = Continuous Opacity Monitoring System; CFM = Continuous Fuel Monitoring;

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VE = Visible Emissions Monitoring; PEMS = Predictive Emissions Monitoring System; CERMS = Continuous Emission Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 6.2.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.1.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.2.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.2.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.10.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.11.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.11.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 7.12	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.1.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.1.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.2.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.2.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

Monitoring Method Abbreviations: RR = Record keeping Requirement; ST = Source Testing; CEMS = Continuous Emissions Monitoring System; COMS = Continuous Opacity Monitoring System; CFM = Continuous Fuel Monitoring; VE = Visible Emissions Monitoring; PEMS = Predictive Emissions Monitoring System; CERMS = Continuous Emission

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Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.2.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.3.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.3.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.3.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.3.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.4.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.5.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.5.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.5.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.6.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.7.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.8.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

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Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.8.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.8.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.8.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.9.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.9.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.10.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.5	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.11.6	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

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TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.12.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.13.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.13.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.13.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.13.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.14.1	☐ Continuous ☒ Intermittent ☐ Not Applicable	RR	---	The 2013 annual compliance report was completed on 11 February 2014.	1
V-04-0 8.14.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.14.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.14.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.15.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.16.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.16.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

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TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.17.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.17.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.18.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.19.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.19.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.19.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.20.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.21.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.22.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.22.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.23.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

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TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.24.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.25.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.26.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.27.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	-------

Monitoring Method Abbreviations: RR = Record keeping Requirement; ST = Source Testing; CEMS = Continuous Emissions Monitoring System; COMS = Continuous Opacity Monitoring System; CFM = Continuous Fuel Monitoring; VE = Visible Emissions Monitoring; PEMS = Predictive Emissions Monitoring System; CERMS = Continuous Emission Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

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TITLE V ANNUAL COMPLIANCE CERTIFICATION FORM
PART 2 – COMPLIANCE STATUS

Facility Name:	Sterigenics U.S., LLC		
AIRS Number:	04-13-067-00093	For Reporting Period:	1-1-14 to 5-26-14

Permit Number & Condition Number	Compliance Status	Monitoring Method	Identification of Deviations		
			Previously Reported	Not Previously Reported (See Part 3)	Total
V-04-0 8.24.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.2	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.3	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.24.4	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.25.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.26.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0
V-04-0 8.27.1	☒ Continuous ☐ Intermittent ☐ Not Applicable	RR	---	---	0

Monitoring Method Abbreviations: RR = Record keeping Requirement; ST = Source Testing; CEMS = Continuous Emissions Monitoring System; COMS = Continuous Opacity Monitoring System; CFM = Continuous Fuel Monitoring; VE = Visible Emissions Monitoring; PEMS = Predictive Emissions Monitoring System; CERMS = Continuous Emission Rate Monitoring System; PMS = Parametric Monitoring System; OMP = Operations and Maintenance Plan; IN = Inspection; Other = Method not listed, provide description.

Sterigenics.

January 12, 2015

Georgia Department of Natural Resources
Environmental Protection Division
Stationary Source Compliance Program
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

Attention: Ms. Karen Hays, Unit Manager

Subject: Semi-annual Synthetic Minor Operating Permit No. 7389-067-0093-S-05-0 for the period of July 1, 2014 to December 31, 2014

This letter provides information for the semi-annual report for the Synthetic Minor Operating Permit for the period July 1, 2014 through December 31, 2014. This report is intended to satisfy all requirements of Condition 7.7 of operating permit number No. 7389-067-0093-S-05-0. For ease of reference, this report is organized by permit condition.

Semi-annual Reporting Requirements

Condition 7.7 requires:

The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending January 1 and June 30 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, July 30 and January 30, respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring sources of Air Pollutants and shall contain the following: [391-3-3-.2(6)(b)1.; 40CFR 63.10 (e)]

a. A Summary report of excess emissions, exceedances and excursions, and monitor downtime, deviations and monitor downtime in accordance with Section 1.5 (c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

There were no recordkeeping/ procedural deviations or excess emissions or excursions associated with section 7.7.

b. Total process operating time during each reporting period. Total processing time was:

4,392 hours (183 days)

AIRS # 067-00093

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

There were no excess emissions, exceedances or excursions during the report period.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

There were no excess emissions, exceedances or excursions during the report period.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

There were no breakdowns of the monitoring system or devices during the reporting period.

f. Per Permit Section 7.4, we have enclosed copies of the monthly testing the Dry Beds for the period July 1, 2014 to December 31, 2014. We did not exceed 0.9 ppm or greater in the outlet.

g. Certification by a Responsible Official, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

Required Statement
Sterigenics U.S., LLC has reviewed all applicable provisions of the Synthetic Minor operating permit.

There have not been deviations from applicable limitations, standards or monitor malfunctions during the reporting period from July 1, 2014 through December 31, 2014.

KA Hoffman — 13-Jan-2015

Kathleen Hoffman
Senior Vice President, Environment, Health and Safety

Date

If you have any questions regarding this submittal, please call me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

Sterigenics

Enclosure: Dry Bed Tests – July 1, 2014 – December 31, 2014

Pc: Air and EPCRA Enforcement Branch, U.S. EPA Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Kathleen Hoffman, Senior Vice-President- EHS
Juan Segovia, Vice-President - Operations
Daryl Mosby – General Manager – Smyrna, Georgia
Kevin Wagner, Director EH&S

SMR:cmq

Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

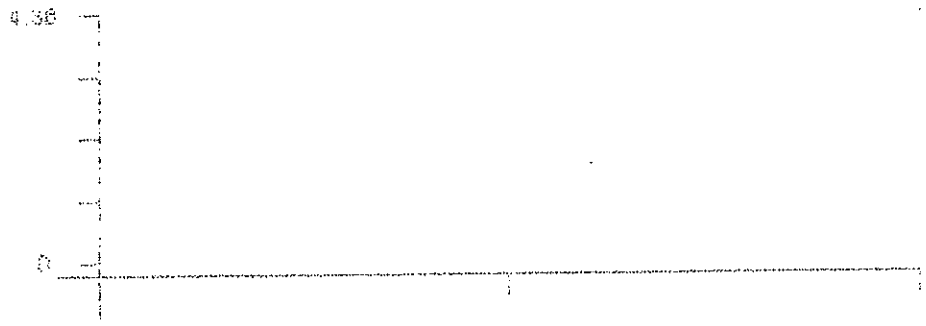
Date of sample collection/testing: 25/July/2014	
Location / Emission type tested: Aeration (circled) Chamber	Position tested: Inlet (circled) Outlet (circled)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 19:09 GMT – 19:27 GMT	
Type of bag used and amount of gas collected: SKC	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 25/July/2014 @ 19:36 GMT	
Sample results: ☐ Inlet Run 1: 0.86 Run 2: 1.76 Run 3: 4.36 Average: 2.33	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Comments: Test performed in accordance with FWI-SM-025.	

Reviewed By: [signature] Date: 25 Jul 2014

Monitor Graph Chart

(Plot

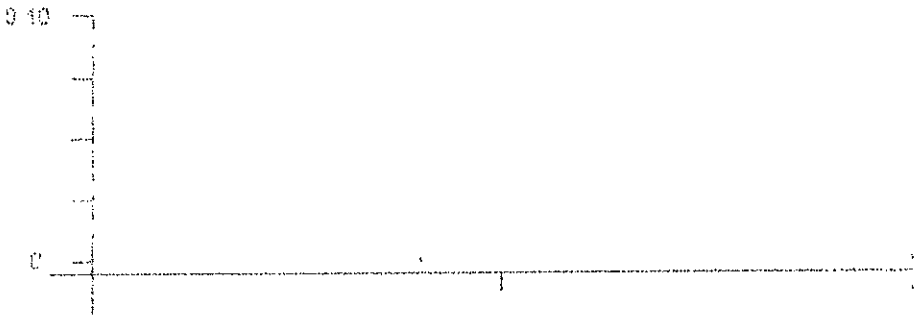
Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Jul 25,2014 19:55
End Time: Jul 26,2014 19:58
Number of points: 3
Average Value: 2.33



Monitor Single Port

Outlet

Port: Chagrasus
Component: ETHYLENE OXIDE
Start Time: Jul 25,2014 20:04
End Time: Jul 25,2014 20:04
Number of points: 3
Average Value: 0.00



Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

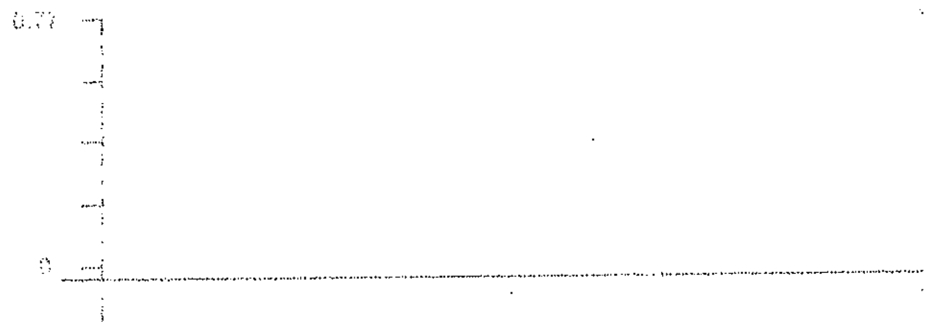
Date of sample collection/testing: 28 August 2014	
Location / Emission type tested: (Aeration) Chamber	Position tested: (Inlet) (Outlet)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 15:47 GMT – 16:05 GMT	
Type of bag used and amount of gas collected: SKC	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 28 August 2014 @ 16:10GMT	
Sample results: ☐ Inlet Run 1: 0.00 Run 2: 0.37 Run 3: 0.77 Average: 0.38	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Comments: Test performed in accordance with SM-WI-025.	

Reviewed By: _____ Date: 28 Aug 2014

[illegible] Single Port

[illegible]

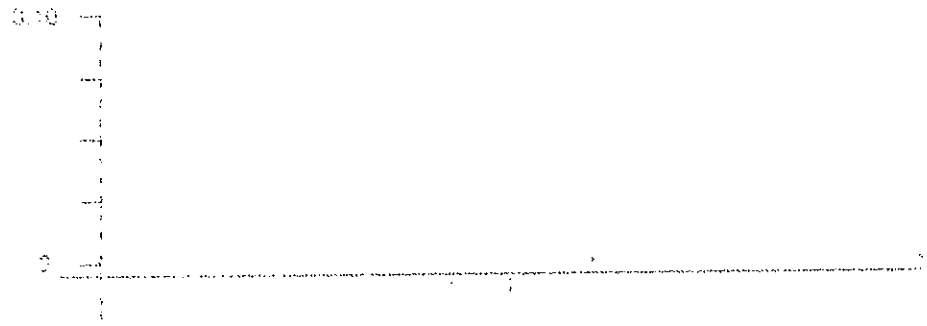
Port Diagnostic
Component: ETHYLENE OXIDE
Start Time: Aug 28,2014 18:26
End Time: Aug 28 2014 18:29
Number of points: 3
Average Value: 0.35



Monitor Range Plot

Outlet

Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Aug 25,2014 16:35
End Time: Aug 26,2014 16:40
Number of points: 5
Average Value: 0.00



Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

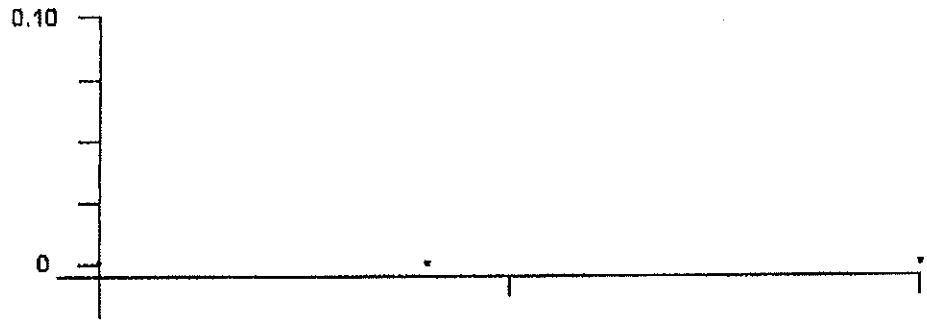
Date of sample collection/testing: 30-Sep-14	
Location / Emission type tested: (Aeration) Chamber	Position tested: (Inlet) (Outlet)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 14:35 GMT – 14:53 GMT	
Type of bag used and amount of gas collected: Flexfoil	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 30-Sep-14 @ 14:55	
Sample results: ☐ Inlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Comments: Test performed and completed in accordance with FWI-SM-025.	

Reviewed By: Daryl Mast Date: 30 Sep 2014

Monitor Single Port

Outlet

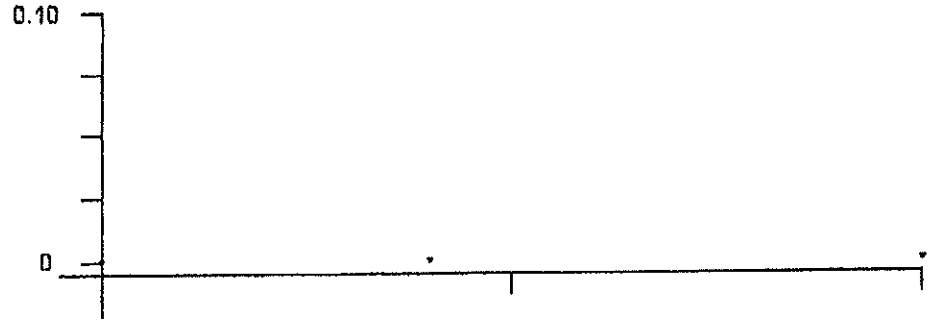
Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Sep 30,2014 14:57
End Time: Sep 30,2014 15:02
Number of points: 3
Average Value: 0.00



Monitor Single Port

Inlet

Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Sep 30,2014 14:46
End Time: Sep 30,2014 14:51
Number of points: 3
Average Value: 0.00



Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

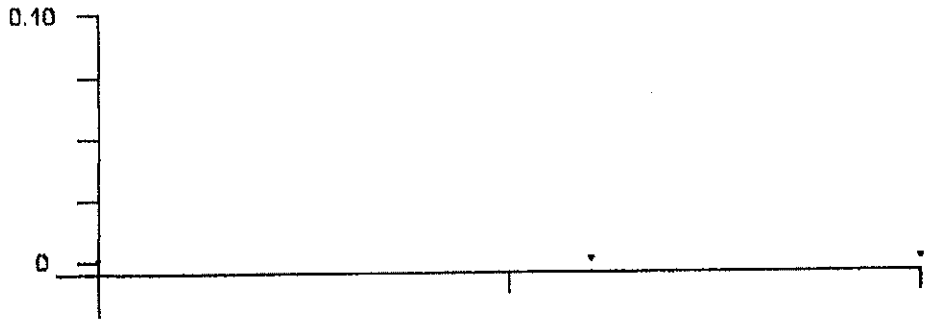
Date of sample collection/testing: 31/ OCT /2014	
Location / Emission type tested: (Aeration) Chamber	Position tested: (Inlet) (Outlet)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 17:47 GMT – 18:09	
Type of bag used and amount of gas collected: SKC	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 31/October/2014 @ 18:19 GMT	
Sample results: ☐ Inlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Comments: Test performed in accordance with FWI-SM-025.	

Reviewed By: _____ Date: 31 Oct 2014

Monitor Single Port

Outlet

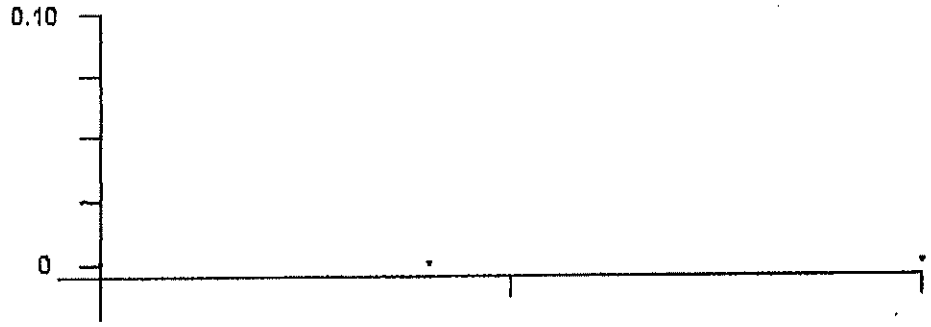
Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Oct 31,2014 18:41
End Time: Oct 31,2014 18:46
Number of points: 3
Average Value: 0.00



Monitor Single Port

Inlet

Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Oct 31,2014 18:30
End Time: Oct 31,2014 18:35
Number of points: 3
Average Value: 0.00



Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

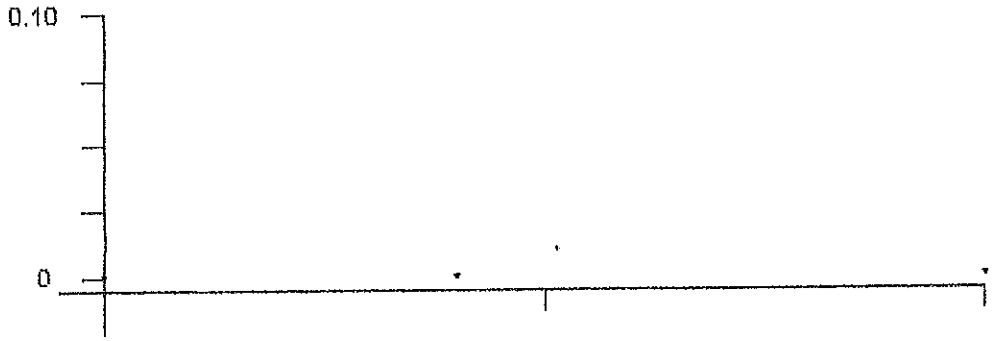
Date of sample collection/testing: 26-November-2014	
Location / Emission type tested: (Aeration) Chamber	Position tested: (Inlet) (Outlet)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 22:09 GMT -22:27 GMT	
Type of bag used and amount of gas collected: SKC	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 26-November-14 @ 22:30 GMT	
Sample results: ☐ Inlet Run 1: 3.75 Run 2: 3.75 Run 3: 3.85 Average: 2.84	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.00 Run 3: 0.00 Average: 0.00	
Comments: Test performed in accordance with FWI-SM-025.	

Reviewed By: D J May Date: 30 Nov 2014

Monitor Single Port

~~INLET~~ Km
Outlet 13-JAN-15

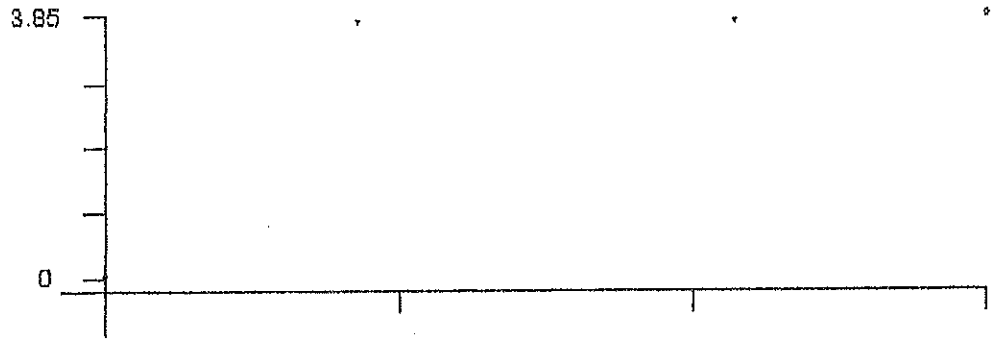
Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Nov 26,2014 22:35
End Time: Nov 26,2014 22:40
Number of points: 3
Average Value: 0.00



Monitor Single Port

~~OUTLET~~ Enc
Inlet 13-JAN-15

Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Nov 26,2014 22:46
End Time: Nov 26,2014 22:53
Number of points: 4
Average Value: 2.84



Sterigenics

AAT Sampling Log

Emission samples of the AAT will be recorded below. The sample will be taken once each month or when needed as per permit.

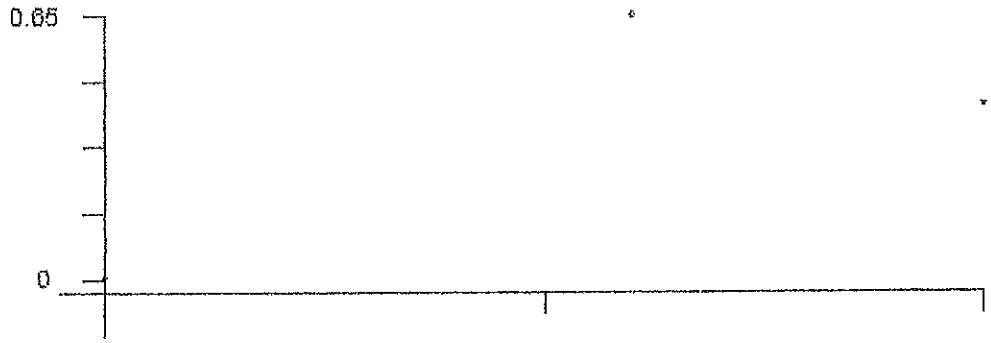
Date of sample collection/testing: 23-December-2014	
Location / Emission type tested: (Aeration) Chamber	Position tested: (Inlet) (Outlet)
☑ Aeration ☐ 1 Chamber Vacuum	
Person collecting the sample: Ken Martin	
Collection time (15 minute minimum): 19:38 GMT to 19:56 GMT	
Type of bag used and amount of gas collected: SKC	
Analysis system used: ☑ In-house Perkin-Elmer ☐ Other:	
Last system calibration Date & Time: 23-December-2014 @ 19:59 GMT	
Sample results: ☐ Inlet Run 1: 5.19 Run 2: 5.04 Run 3: 3.94 Average: 4.72	
Sample results: ☐ Outlet Run 1: 0.00 Run 2: 0.65 Run 3: 0.42 Average: 0.36	
Comments: Test conducted in accordance with FWI-SM-025.	

Reviewed By: _____ Date: 29 Dec 2014

Monitor Single Port

~~Inlet~~ Outlet KM 13-Jan-15

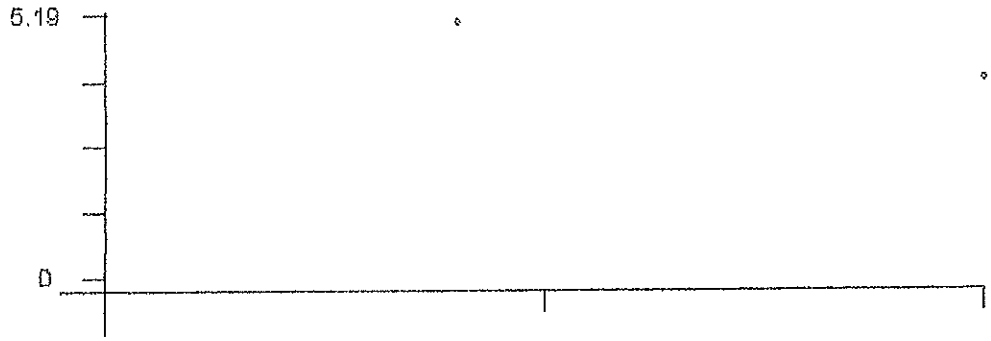
Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Dec 23,2014 20:06
End Time: Dec 23,2014 20:11
Number of points: 3
Average Value: 0.36



Monitor Single Port

~~Outlet~~ KM
Inlet 13-JAN-15

Port: Diagnostic
Component: ETHYLENE OXIDE
Start Time: Dec 23,2014 20:18
End Time: Dec 23,2014 20:23
Number of points: 3
Average Value: 4.72



Sterigenics.

August 11, 2014

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Notification: Completion of Construction**
Permit No. 7389-067-0093-S-05-0

Dear Mr. Holder:

As required by our air permit, section 7.5, Sterigenics is providing construction completion notification of Chamber 10 (SEV-10) and Aeration Room 1 (AR-1).

Chamber 10 (SEV-10)
Construction was completed on Chamber 10 on August 7, 2014. (Condition 7.5-a) The current anticipated start-up date for Chamber 10 is October 10, 2014. (Condition 7.5-b)

Aeration Room 1(AR-1)
The Aeration Room 1 construction was completed and placed into service on June 6, 2014 (Condition 7.5, a-c).

Please do not hesitate to contact me with questions. You can reach me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

pc:

Kathy Hoffman – Sr. VP, EH&S
Daryl Mosby - Smyrna General Manager
Juan Segovia – VP – EO Operations
Kevin Wagner – Director, EHS

US EPA Region IV
Air and EPCRA Enforcement Branch
61 Forsyth Street
Atlanta, GA 30303

Mr. Michael Odom, Unit Manager
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Mr. Heather Cottrell
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Sterigenics International LLC
2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00093

Holder, Don

From: Holder, Don
Sent: Monday, July 25, 2016 11:58 AM
To: sreinhardt@sterigenics.com
Subject: March 2016 Ceilcote Scrubber System testing
Attachments: Ceilcote Packed Tower Scrubber March 2016.pdf

The Industrial Source Monitoring Program of the Air Protection Branch has reviewed the Performance Test Report for the Sterigenics, U.S., LLC Ceilcote Scrubber System conducted on March 17-18, 2016.

The review of the report indicates an average destruction efficiency of 99.9999%. The test results appear to comply with the requirements of ~~Part 70~~ Permit 7389-067-0093-S-05-3. A copy of the test report review is attached for your files.

If you have any questions concerning this letter or compliance with your air quality permits, please contact me at 404/362-4846 or by e-mail at don_holder@mail.dnr.state.ga.us.

AIRS # 067-00093

Georgia Department of Natural Resources

Environmental Protection Division · Air Protection Branch
4244 International Parkway · Suite 120 · Atlanta · Georgia 30354
Telephone: 404/363-7000 · Fax: 404/363-7100
Judson H. Turner, Director

JUL 18 2016

MEMORANDUM:

TO: Michael Odom
THROUGH: Ross Winne, Marcus Cureton
FROM: Anna Gray
SUBJECT: SOURCE TEST REPORT REVIEW

The following test has been reviewed and was conducted in an acceptable fashion for the purpose intended.

COMPANY NAME	Sterigenics U.S. LLC
COMPANY LOCATION	Atlanta, GA
SOURCE TESTED	10-Sterilizer Chambers/Ceilcote Packed Tower Scrubber
POLLUTANT DETERMINED	Ethylene Oxide
REPORT REVIEWED BY	Anna Gray
TEST WITNESSED BY	Ross Winne
DATE(S) OF TEST	March 17, 2016 to March 18, 2016
DATE RECEIVED BY APB	May 24, 2016
APPLICABLE REGULATION	Permit No. 7389-067-0093-S-05-3, Condition 2.3
MEMORANDUM	The reduction efficiency test of the Ceilcote packed tower scrubber emission control system was conducted in accordance with USEPA CFR 40, Part 63.365. At least one of the test runs was performed using emissions from the new30-pallet sterilizer (Chamber#11). The other two chambers were: #3 and #8. Run #1 Inlet EtO= 44.9 lbs Outlet EtO= 0.0000065 lbs EtO Control Efficiency= 99.9999% Minutes/cycle= 24 Run #2 Inlet EtO=61.9 lbs Outlet EtO= 0.0000141 lbs EtO Control Efficiency= 99.9999% Minutes/cycle= 23 Run #3 Inlet EtO= 76.1 lbs Outlet EtO= 0.0000076 lbs EtO Control Efficiency= 99.9999% Minutes/cycle= 20 Average EtO Control Efficiency: 99.9999% Required EtO Control Efficiency: 99% The amount of ethylene oxide used during each sterilization cycle was calculated by the Gas law and the conditions at the beginning and the end of every exhaust phase. All exhaust phase testing wsa conducted during normal process load conditions, but with an empty sterilization chamber to facilitate inlet mass calculation and the performance of multiple test runs. Parameters during test: Ceilcote scrubber readings: pH= 1.2 ; Storage tank level=: 186 inches ;Glycol concentration=36.3% AAT scrubber readings: pH=0.9; Tank level= 105 inches; Glycol concentration=36.8%

cc: Ross Winne
Reference Number: 201600650

AIRS Number: 06700093
Printed: 7/12/2016

Sterigenics.

March 8, 2016

Mr. Don Holder
Georgia EPD
Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Subject: **Notification: Chamber 11 – Initial Date of Start-Up**
Permit No. 7389-067-0093-S-05-3

Dear Mr. Holder:

As required by our air permit, section 7.8, Sterigenics is providing notification of the initial start-up date of Chamber 11 (SEV-11).

Chamber 11 (SEV-11)
The Atlanta facility began production with the use of Chamber 11 today, March 8, 2016, (Condition 7.8-c). Performance testing is scheduled to begin the afternoon of March 17, through March 18, 2016 and Mr. Ross Winne is aware and invited to attend the testing.

Please do not hesitate to contact me with questions. You can reach me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt
Manager
Environment, Health and Safety

pc:

Kathy Hoffman – Sr. VP, EH&S
Daryl Mosby - Smyrna General Manager
Juan Segovia – VP – EO Operations
Kevin Wagner – Director, EHS

US EPA Region IV
Air and EPCRA Enforcement Branch
61 Forsyth Street
Atlanta, GA 30303

Mr. Michael Odom, Unit Manager
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Mr. Sean Taylor
Georgia EPD, Air Protection Branch
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

Sterigenics International LLC
2015 Spring Road, Suite 650 • Oak Brook, IL 60523
Tel 630.928.1700 • Fax 630.928.1701 • www.sterigenics.com

AIRS # 067-00093

Holder, Don

From: Holder, Don
Sent: Friday, January 29, 2016 12:40 PM
To: sreinhardt@sterigenics.com
Subject: 2nd semiannual report 2015

The Division received the semi-annual report dated January 14, 2016 for your facility for the July through December 2015 reporting period. The report, received on January 20, 2016, appears to satisfy the requirements of Condition 7.7 of Georgia Air Quality Permit 7389-067-0093-S-5-0, as amended, and Condition 6.1.4 of the previous Permit No. 7389-067-0093-S-05-0.

If you have any questions about compliance with your permit, please contact me at 404/362-4846 or by email at: don.holder@dnr.state.ga.us.

AIRS # 067-00093

Sterigenics.

January 14, 2016

Georgia Department of Natural Resources
Environmental Protection Division
Stationary Source Compliance Program
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908

Attention: Ms. Karen Hays, Unit Manager

Subject: Semiannual Synthetic Minor Deviation Report for Sterigenics, U.S., LLC, Atlanta, Georgia Facility Operating **Permit No. 7389-0670093-S-05-0** for the period of July 01, 2015 to December 31, 2015

This letter provides information for the semi-annual Synthetic Minor Permit Deviation Report for Sterigenics, Inc.'s Atlanta, Georgia facility covering the period from January 1, 2015 through June 30, 2015. This report is intended to satisfy the monitoring and reporting requirements of Condition 5.4, 7.4 and 7.7 of Part 70 operating permit number 7389-067-0093-S-05-0. For ease of reference, this report is organized by permit condition.

Semiannual Deviation Reporting Requirements

Condition 5.4 requires:

The Permittee shall maintain and operate the AAT Scrubber System (EC2) to ensure a maximum emission level of 1 ppmv or a reduction of 99% for aeration room vents (AR-1, AR-11 through AR-13) and a reduction efficiency of 99% for sterilization chamber vents (SEV-1- SEV-10):

a. Aeration room vents: AR-1, AR-11 through AR-13 – Once per month the Permittee shall simultaneously collect and record the concentration of a 15-minute ethylene oxide bag sample from both the inlet and outlet of the dry bed absorbers:	
i. Facilities complying with the 1ppmvd standard, as specified in condition No. 2.4, and the concentration of ethylene oxide in the outlet sample of the dry bed absorbers increases to 0.9 ppmv or greater, the Permittee shall replace the dry bed material within 30 days, prior to the next scheduled aeration room exhaust sampling event.	We did not exceed 0.9 ppm or greater in the outlet.
ii. Facilities complying with the 99% reduction efficiency standard, as specified in Condition No. 2.4, and the AAT Scrubber System reduction efficiency decreases to 99.1% or less, the Permittee shall replace the dry bed material within 30 days prior to the next scheduled aeration exhaust sampling event. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed absorbers.	Performance testing conducted on October 24, 2014 indicated efficiency for the AAT scrubber at 99.96%.

AIRS #067-00093

b. Aeration room vents (AR-1, AR-11 – AR-13) and sterilization chamber vents (SEV-1 through SEV-10) – any instance when sterilization chamber exhausts and aeration room exhausts are simultaneously vented through the AAT Scrubber System, the Permittee shall comply with the 99% reduction efficiency standard. During any such event, the Permittee shall collect and record the concentration of a 15-minute ethylene oxide bag sample from the outlet of the dry bed adsorbers within 96 hours of changeover. The AAT Scrubber System reduction efficiency shall be calculated by comparing the ethylene oxide loading into the AAT Scrubber System to the ethylene oxide mass exiting the dry bed adsorbers. If the reduction efficiency of the AAT Scrubber System is less than 99.1%, the Permittee shall not route any sterilization replaced. Bag testing shall continue at a sampling frequency of once per week during the changeover of the sterilization chamber vents from the Ceilcote Scrubber (EC3) to the AAT Scrubber System.	N/A
c. When the Permittee is sampling in accordance with Condition Number 5.3a or 5.3b, the ethylene oxide loading to the AAT Scrubber System, the ethylene oxide mass out of the AAT dry adsorbers and the AAT Scrubber System reduction efficiency shall be recorded for each sampling event. These records shall be kept in a form suitable for inspection or submission to the Division. Methods of calculation for these measurements shall be submitted in the site-specific monitoring plan.	N/A
d. The dates of dry bed material placement shall be recorded and kept in a form suitable for inspection or submission to the Division.	N/A

Reporting Requirements

Condition 7.4 For each monthly sampling event conducted in accordance with conditions 5.4.a and 5.4.b, the Permittee shall include the following information in the semi-annual report required by Condition 7.8.

a. AAT Scrubber (EC2): List any occurrence when analysis of the dry bed adsorber outlet sample concentration exceeded 1 ppmv.	N/A Dry Bed Testing is available upon department request
b. For the AAT Scrubber System (EC2), list any occurrence when the AAT Scrubber reduction efficiency indicates that the efficiency is less than 99%.	N/A
c. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the ethylene glycol concentration in the acid-water scrubber liquor is in excess of the maximum ethylene glycol concentration established during initial performance testing.	N/A

d. For the acid-water scrubbers (AAT Scrubber System EC2 and Ceilcote Scrubber EC3, list any occurrence when the liquor recirculation tank level of the acid-water scrubber is in excess of the maximum liquor tank level established during initial performance testing.	N/A
e. For the acid-water scrubbers (AAT Scrubber System EC2) and Ceilcote Scrubber EC3, any occurrence wh4en the scrubbing liquor pH rises above the manufacturers recommended level of 2.	N/A
f. For the AAT Scrubber System (EC2) list any occurrence when analysis of the dry bed adsorber outlet sample indicates the concentration exceeds 0.9 ppmv, but is less than or equal to 1 ppmv.	N/A
g. For the AAT Scrubber System (EC2), list any occurrence when AAT Scrubber System reduction efficiency indicates the efficiency is less than 99.1%, but is greater than or equal to 99%.	N/A
h. For the AAT Scrubber System, (EC2), list any instance when the AAT Scrubber System breaches a dry bed adsorber material replacement threshold, but he dry bed material is not replace within 30 days.	N/A

Condition 7.7 requires:

The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending January 1 and June 30 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, July 30 and January 30, respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring sources of Air Pollutants and shall contain the following: [391-3-1-.02(6)(b) 1 and 40 CFR 63.10 (e)]

a. A Summary report of excess emissions, exceedances and excursions, and monitor downtime, deviations and monitor downtime in accordance with Section 1.5 (c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

   There were no recordkeeping/ procedural deviations or excess emissions or excursions associated with section 7.7.

b. Total process operating time during each reporting period. Total processing time was:

   4,416 hours (184 days)

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of such occurrence.

   There were no deviations during the period.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

There were no deviations during the period.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

There were no breakdowns of the monitoring system or devices during the reporting period.

f. Certification by a Responsible Official, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

Required Statement

Sterigenics U.S. LLC has reviewed all applicable provisions of the Atlanta Synthetic Minor operating permit.

There have not been deviations from applicable limitations or standards or monitor malfunctions during the reporting period from July 01, 2015 through December 31, 2015.

KA Hoffman — 15-Jun-2016

Kathleen Hoffman
Senior Vice President, Environment, Health and Safety

Date

If you have any questions regarding this submittal, please call me at (630) 928-1768.

Kind Regards,

Susan M. Reinhardt

Susan M. Reinhardt
Manager
Environment, Health and Safety

cc: Air and EPCRA Enforcement Branch, U.S. EPA Region 4
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SMR:cmq