

# Georgia Department of Natural Resources

Environmental Protection Division • Air Protection Branch

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Judson H. Turner, Director

## NARRATIVE

TO: David Matos

FROM: Chan Spraley

DATE: February 26, 2015

Facility Name: **Sterigenics U.S. LLC**

AIRS No.: 067-00093

Location: Atlanta, GA (Cobb County)

Application #: 22970

Date of Application: November 18, 2014

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### Background Information

Sterigenics U.S. LLC (“Sterigenics”) is permitted as an ethylene oxide and propylene oxide sterilization facility located at 2973 Olympic Industrial Park, Atlanta, Georgia (Cobb County). The facility operates under Permit No. 7389-067-0093-S-05-0, issued May 27, 2014. The facility is subject to 40 CFR 63 Subpart O – “Ethylene Oxide Emission Standards for Sterilization Facilities.” The facility was re-classified from Title V to Synthetic Minor with the most current permit.

### Purpose of Application

Sterigenics submitted Application No. 22970, dated November 18, 2014, for the installation and operation of a new 30-pallet chamber and vacuum pump (5,174 cubic feet: Chamber 11: SEV-11 and CEV-11).

### Updated Equipment List

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
SEV-1	Six-pallet Sterilization Chamber 1 vacuum pump	1967	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-2	Six-pallet Sterilization Chamber 2 vacuum pump	1967	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-3	Nine-pallet Sterilization Chamber vacuum pump	1967	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-4	Five-pallet Sterilization Chamber vacuum pump	1967	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
SEV-5	Thirteen-pallet Sterilization Chamber vacuum pump	1987	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-6	Thirteen-pallet Sterilization Chamber vacuum pump	1992	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-7	Thirteen-pallet Sterilization Chamber vacuum pump	1994	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-8	Thirteen-pallet Sterilization Chamber vacuum pump	1994	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-9	Fifteen-pallet Sterilization Chamber vacuum pump	2002 Decom 2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-10	Thirty-pallet Sterilization Chamber vacuum pump	2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
SEV-11*	Thirty-pallet Sterilization Chamber vacuum pump*	2015*	EC2	AAT Scrubber System (with Dry Bed Adsorber)
			EC3	Ceilcote Scrubber
CEV-1	Back vent for Chamber 1	1967	NA	None
CEV-2	Back vent for Chamber 2	1967	NA	None
CEV-3	Back vent for Chamber 3	1967	NA	None
CEV-4	Back vent for Chamber 4	1967	NA	None
CEV-5	Back vent for Chamber 5	1987	NA	None
CEV-6	Back vent for Chamber 6	1992	NA	None
CEV-7	Back vent for Chamber 7	1994	NA	None
CEV-8	Back vent for Chamber 8	1994	NA	None
CEV-9	Back vent for Chamber 9	2002 Decom 2014	NA	None
CEV-10	Back vent for Chamber 10	2014	NA	None
AR-11	Aeration Room 11	1994 Decom 2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)
AR-12	Aeration Room 12	1994 Decom 2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)
AR-13	Aeration Room 13	1997 Decom 2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)
AR-1	Aeration Room 1	2014	EC2	AAT Scrubber System (with Dry Bed Adsorber)

\*proposed within current application

**Emissions Summary****Facility-Wide Emissions**  
(in tons per year)

Pollutant	Potential Emissions			Actual Emissions		
	Before Mod.	After Mod.	Emissions Change	Before Mod.	After Mod.	Emissions Change
PM	<100	<100	0	0.08	0.08	0
NO <sub>x</sub>	<25	<25	0	3.1	3.1	0
SO <sub>2</sub>	<100	<100	0	0.007	0.007	0
CO	<10	<10	0	0.93	0.93	0
VOC	<25	<25	0	1.6	1.6	0
Max. Individual HAP	<10	<10	0	3.1	3.9	0.8
Total HAP	<25	<25	0	3.1	3.9	0.8

**Regulatory Applicability**

There are no new rules or regulation applicability associated with this proposed project. The facility will continue to comply with all applicable rules and regulations.

**Toxic Impact Assessment**

No Toxic Impact Assessment (TIA) was performed as no significant change in toxics emissions is expected to result from this modification.

**Summary & Recommendations**

I recommend issuing Air Quality Permit Amendment No. 7389-067-0093-S-05-2 to Sterigenics for the installation and operation of a new 30-pallet chamber and vacuum pump. No public advisory was issued for this modification since applicable emissions will not increase above levels in specified by Georgia Rule 391-3-1-.03(6)(i) according to Application No. 22970. The facility will remain as a synthetic minor source. Compliance responsibility for the source will remain with SSCP.