



Richard E. Dunn, Director

Air Protection Branch

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MEMORANDUM

TO: William Fleming
THROUGH: Daniel McCain
FROM: Marie Miller
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 ADDRESS	Atlanta, GA
SOURCE TESTED	Backvent Testing
POLLUTANT DETERMINED	Ethylene Oxide
REPORT REVIEWED BY	Marie Miller
TEST WITNESSED BY	Marie Miller
DATE(S) OF TEST	June 30, 2022
DATE RECEIVED BY APB	August 29, 2022
APPLICABLE REQUIREMENT	Permit No. 7389-067-0093-S-06-0 Condition 2.8

MEMORANDUM	<p>Per Permit No. 7389-067-0093-S-06-0 Condition 2.8 the Permittee shall reduce ethylene oxide emissions to the atmosphere from each Sterilization Chamber Backvent (Source Codes CEV-1, CEV-2, CEV-3, CEV-4, CEV-5, CEV-6, CEV-7, CEV-8, CEV-10, CEV-11) to a maximum concentration of 1 part per million, volume basis (ppmv) or by at least 99%, whichever is less stringent</p> <p>The reduction efficiency of the AAT Scrubber System with Dry Bed Adsorbers (EC2), which controls the emissions from the Sterilization Chamber Backvents (Source Codes CEV-1, CEV-2, CEV-3, CEV-4, CEV-5, CEV-6, CEV-7, CEV-8, CEV-10, CEV-11), was determined in accordance with EPA ALT-142 and the following equation: $RE_{bv} = [(Ea/bv + Eoc) - Eps] / (Ea/bv + Eoc)$. Some measurements were below the minimum detectable concentration (MDC#2). For those data points, the MDC was used in the calculations.</p> <p>Average EtO Concentration at the Process Stack = < 0.0106 ppmv Average EtO Emissions at the Aeration/Backvent Outlet (Ea/bv) = 1.893 lb/hr Average EtO Emissions at the Ceilcote Outlet (Eoc) = 5.19E-2 lb/hr Average EtO Emissions at the Process Stack (Eps) = < 7.27E-4 lb/hr Average EtO Control Efficiency (REbv): 99.95%</p>
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cc: William Fleming
 AIRS Number: 067-00093

Reference Number: 202200835
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