



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Air Protection Branch

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MEMORANDUM:

TO: Stephen Damaske
THROUGH: Daniel McCain
FROM: Ray Shen
SUBJECT: SOURCE TEST REPORT REVIEW

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

COMPANY NAME	BD (Becton, Dickinson and Company)
COMPANY LOCATION	Madison, GA
SOURCE TESTED	Dry Bed System 1 (SYS1)
POLLUTANT DETERMINED	Ethylene Oxide
REPORT REVIEWED BY	Ray Shen
TEST WITNESSED BY	Ray Shen, Marcus Cureton
DATE(S) OF TEST	June 30, 2020
DATE RECEIVED BY APB	September 21, 2020
APPLICABLE REGULATION	EPD Consent Order dated October 28, 2019

MEMORANDUM	<p>System One (SYS1) captures potential fugitive emissions from the facility's seven Sterilization Vessel Rooms (VRM1, VRM2, VRM3, VRM4, VRM5, VRM6, and VRM7), the Vessel to Aeration Transfer Corridors (UCO1 and UCO2), and the EO Dispensing Rooms (DRM1 and DRM2). SYS1 consists of (18) Dry Beds (DB). Pressure drop across each DB was approximately 1.6 inches H2O during testing.</p> <p>Samples were collected into Summa Canisters in accordance with EPA Method TO-15 (GC/MS in Selective Ion Monitoring (SIM) Mode) at inlet and outlet of an AAT Dry Bed System. Sample duration was (4) hours. Analysis was performed by Eurofins, an independent lab. Results were reported in ug/M3 (ppb).</p> <p>136 pallets were in seven Sterilization Vessel Rooms during testing.</p> <p>Ethylene Oxide (EtO)</p> <table border="1"> <thead> <tr> <th></th> <th>Concentration (micrograms/m³)</th> <th>Flow (dscfm)</th> <th>Mass rate (lb./hr.)</th> </tr> </thead> <tbody> <tr> <td>Inlet</td> <td>180</td> <td>19,323</td> <td>0.01303</td> </tr> <tr> <td>Outlet</td> <td>0.30</td> <td>18,074</td> <td>0.00002</td> </tr> </tbody> </table> <p>DRE of Dry Bed System (SYS1) is 99.85%.</p>		Concentration (micrograms/m ³)	Flow (dscfm)	Mass rate (lb./hr.)	Inlet	180	19,323	0.01303	Outlet	0.30	18,074	0.00002
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