



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Air Protection Branch

4244 International Parkway, Suite 120
Atlanta, Georgia 30354
404-363-7000

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 2 (SYS2)
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 Two (SYS2) captures potential fugitive emissions from the Work-In-Progress (WIP) area of the facility where product is stored after sterilization and prior to shipment. SYS2 consists of (32) Dry Beds. Pressure drop across each DB was approximately 3.6 inches H2O during testing.</p> <p>Samples were collected into (7) 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>Work In Process (WIP) area has a max. pallet storage capability of 864 Pallets. 822 pallets were stored during the test.</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 1</td> <td>400</td> <td>11,460.5</td> <td>0.01717</td> </tr> <tr> <td>Inlet 2</td> <td>520</td> <td>11,208.5</td> <td>0.02183</td> </tr> <tr> <td>Inlet 3</td> <td>980</td> <td>9,741.9</td> <td>0.03576</td> </tr> <tr> <td>Inlet 4</td> <td>990</td> <td>9,903.4</td> <td>0.03673</td> </tr> <tr> <td>Inlet 5</td> <td>710</td> <td>5,531.4</td> <td>0.01471</td> </tr> <tr> <td>Inlet 6</td> <td>670</td> <td>3,818.6</td> <td>0.00958</td> </tr> <tr> <td>Inlet 7</td> <td>390</td> <td>9,554.7</td> <td>0.01396</td> </tr> <tr> <td>Outlet</td> <td>0.24</td> <td>53,404.5</td> <td>0.00005</td> </tr> </tbody> </table> <p>DRE of Dry Bed System (SYS2) is 99.97%.</p>		Concentration (micrograms/m ³)	Flow (dscfm)	Mass rate (lb./hr.)	Inlet 1	400	11,460.5	0.01717	Inlet 2	520	11,208.5	0.02183	Inlet 3	980	9,741.9	0.03576	Inlet 4	990	9,903.4	0.03673	Inlet 5	710	5,531.4	0.01471	Inlet 6	670	3,818.6	0.00958	Inlet 7	390	9,554.7	0.01396	Outlet	0.24	53,404.5	0.00005
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