NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Air Resources, Region 9
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March 3, 2017

Mr. Steven Wilsey
GHD
2055 Niagara Falls Boulevard
Niagara Falls, New York 14304

Dear Mr. Wilsey:

CWM Chemical Services, LLC
Emission Modeling Protocol
NYSDEC Air State Facility Permit
Permit No. 9-2934-00022/00233.

The Department has reviewed the air quality modeling protocol that was submitted on February 3, 2017 by GHD, on behalf of CWM Chemical Services, LLC (CWM) located in Model City, New York. The protocol document details the proposed air quality dispersion modeling to be used to compare the maximum modeled ground-level concentrations of emissions from the CWM facility to the short-term guidance concentrations (SGCs) and annual guideline concentrations (AGC) in DEC Policy DAR-1, which is the Guidelines for the Evaluation and Control of Ambient Air Contaminants under Part 212 of Title 6 of the New York Codes, Rules and Regulations.

Emission rates from CWM's previous application have been revised to include proposed process and annual emission rate limitations. Based on the currently available information provided to Department staff to date, the revised calculations appear appropriate. Please be advised that Department staff reserve all rights to modify that position following its review of the complete and comprehensive revised application, and any supporting documentation, following its formal submission in response to the Notice of Incomplete Application. As a reminder, the revised application shall include, at a minimum, supporting calculations and a demonstration that CP-33 does not apply.

The protocol is acceptable contingent on the emissions modeling be performed in accordance with the following and documented as such in the report:

(1) **Section 3**: The AERMOD version 16216r should be used to model the emission impacts. Please contact Mr. John Kent in the Department's

Bureau of Air Quality Analysis and Research to request new AERMET data generated from AERMET version 16216.

(2) **Section 3.2**: More detailed information, such as dimensions and heights of the area sources (landfills), should be provided in Figure 1.

(3) Section 3.7 and table 2:

a. The terrain data file should contain the topography of all the landfill cells (listed on table 2). If not, the terrain data should be adjusted so that it accurately represents the heights and contours of the landfill cells before processing the receptors- the point and area sources in AERMAP. Survey data would provide the necessary accuracy. The release height for area sources should be set as zero meters, assuming that the emissions come from the ground surface.

b. Since it is not practical to model changing terrain of proposed RMU-2 over time, please set the terrain to reflect worst case conditions which is the top of the proposed berms of RMU-2. The terrain data file shall be adjusted to reflect the release height.

c. Base elevation of any point sources should be based on survey data, rather than using elevations assigned by AERMAP.

d. The terrain data file should also be adjusted so that it accurately depicts the neighboring landfill. Document the terrain data used.

e. There are a few options to adjust the terrain data to reflect the existing landfill cells based on survey data. One is to manually alter the NED files before using them in AERMAP. The other is to run AERMAP with the standard NED files, then go in and alter the heights of all of the receptors that are within the area in question before running AERMOD. Whichever method is used, document the methodology used and include it in the report.

(4) Table 2: The emission rates for all sources should be listed in the report.

If you have any questions regarding modeling, please contact Mr. John Kent with the Department's Bureau of Air Quality Analysis and Research at (518) 402-8402 or by email john.kent@dec.ny.gov. Other questions can be addressed to myself or Michael Emery at 715-851-7130.

Sincerely,

Alfred Carlacci
Regional Air Pollution Control Engineer

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Mr. Bryan Szalda, GHD