NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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Sent Via Email Only

June 5, 2024

ENVIRONMENTAL SOIL MANAGEMENT INC, Attn: Robert Martin 304 Towpath LN Fort Edward NY, 12828-1754 rmartin@cleanearthinc.com

Re: ESMI of New York (ESMI),

Facility ID: 5-5330-00038/00027

Fort Edward (T), Washington County

Dear Robert Martin:

The department has the following comments to the responses submitted by you on April 15, 2024, for the Notice of Incomplete Application (dated March 15, 2024):

- 1. Page 1 from your April 15 submittal: The PFAS 'deposition' modeling methodology indicated in response Item # 2 is still not acceptable modeling assumptions. Method 1 is designed to calculate the deposition of particles with diameters greater than 10 μm . Most, if not all, of the emitted air contaminants will be smaller than 10 μm and will therefore have different gravitational settling velocities, aerodynamic resistance, etc. The emissions must be modeled using the default air dispersion modeling options, without the Method 1 deposition component of the plume. Please provide the updated modeling protocol and reports using the correct modeling method.
- 2. Page 11, last paragraph from your April15 submittal: The EPA test methods for measuring PFAS Compounds both in the soil and air media have expansive analyte lists. As such, there will be many more PFAS compounds that the DEC will require to be "evaluated" than the limited amount listed out in this paragraph. That expanded evaluation/analyses may not be possible and/or warranted going into this proposed 2-week RD&D project, but it would be necessary, upon obtaining the results of the testing required to be performed, for the facility to be granted DEC's approval to continue these process operations beyond that short RD&D project time-period.
 - a. Therefore, rather than being so prescriptive with only these individual PFAS Compounds being identified, it'd be better just to use the encompassing term of "PFAS" or "PFAS Compounds" in general to allow the flexibility for the evaluation of all the PFAS that will be able to be measured, as will be required at some time.
 - b. Alternatively, the first sentence of this paragraph could be edited to something such as the following: "The PFAS contaminants will be evaluated including, but not limited to, the following USEPA regulated PFAS compounds."



Robert Martin

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- 3. Page 14, the 2nd Paragraph of Section 3.1 from your April 15 submittal: (*Note, this is the* first occurrence, but which is also indicated in many additional locations throughout the document): Please explain how the PFAS destruction efficiencies of the RD&D project operations (estimated to range from 99.90-99.99%) were determined. Additional documentation supporting that specified PFAS destruction efficiency range for the facility's thermal treatment system and the source(s) used to make the determination(s) must be provided, including references used to arrive at this indicated destruction efficiency range.
- 4. Page 40, Table 4 from your April 15 submittal: Please correct the column title "Max Annual Dispersion" to "Max Annual Dispersion Concentration."
- 5. Page 156, Table 2 from your April 15 submittal: The NYSDOH-derived interim AGC for CF $_4$ is 330 μg m $^{-3}$, and not the 0.33 μg m $^{-3}$ listed. So, the maximum annual dispersion concentration for CF₄ was calculated to be 1.6×10E-5% of its AGC, and not the 0.02% that's indicated. Please update the PDF Page 156 Table 2 accordingly.
 - a. The maximum annual dispersion concentration (see previous comment above) for CF₄ is indicated to be 1.74E-05% of its AGC in Table 4 on PDF Page 40, which differs from the value listed in the previous bullet above. Please update the maximum annual dispersion concentration accordingly.
 - b. The notation that the CF₄ AGC listed has not formally accepted by the NYSDEC is incorrect. The NYSDEC has adopted the CF4 AGC value.

If you have any questions regarding this, please contact Yasmini Patel at 518-623-1217 or vasmini.patel@dec.ny.gov.

Sincerely,

James E. Hogan III, P.E.

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Regional Air Pollution Control Engineer Region 5, Division of Air Resources

YP:ja

ec:

Y. Patel/File

B. Magee