

May 17, 2023

Via Email: erin.burns@dec.ny.gov

Ms. Erin Burns NYSDEC Region 5 Regional Permit Administrator, Division of Environmental Permits 1115 NYS Route 86, PO Box 296 Ray Brook, New York 12977

Subject: Saratoga Biochar Solutions, LLC

Notice of Incomplete Application

NYSDEC Permit Application ID 5-4144-00187/00001

STERLING File #2020-20

Dear Ms. Burns,

On behalf of Saratoga Biochar Solutions, LLC (SBS), Sterling Environmental Engineering, P.C. (STERLING) submits this letter in response to the May 2, 2023 Notice of Incomplete Application (NOIA) issued by the New York State Department of Environmental Conservation (NYSDEC).

For ease of reference, the following responses correspond directly to the enumerated comments provided by NYSDEC.

## **Air State Facility Comments:**

- 1. The thermal oxidizer manufacturer has estimated the destruction efficiency of PFAS compounds at 99.99%. The Air State Facility Permit Application has been updated to include this information.
- 2. The AERMOD analysis has been updated to include potential emissions of PFOA as a surrogate for all PFAS compounds. The AERMOD analysis is now included in an updated Air State Facility Permit Application (See Response 7).
- 3. Representative analytical data for biosolids and manufactured Carbon Fertilizer™ have been reviewed to estimate the PFAS concentrations in incoming biosolids and the estimate of total PFAS emissions from the Facility. The Air State Facility Permit Application has been updated to include this information.
- 4. The AERMOD plume maps have been updated to include the shapefile limits of the final Disadvantaged Community (DAC) areas. The AERMOD analysis is now included in an updated Air State Facility Permit Application (See Response 7).
- 5. The CLCPA analysis has been updated to include a comprehensive greenhouse gas (GHG) lifecycle analysis that includes indirect emissions associated with truck traffic to and from the Facility.
- 6. The CLCPA Section 7(2) and 7(3) analyses have been updated for the entire Facility within the updated Air State Facility Permit Application that captures all changes/revisions requested and provided to NYSDEC (See Response 7).

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7. The Air State Facility Permit Application has been updated to include all design changes and all responses to NYSDEC NOIAs. Please note that the Town of Moreau has assigned a newly created address to the project parcel of 55 Farnan Road, Moreau, NY 12828. The application form has been updated accordingly.

## **Solid Waste Management Comments:**

- 1. Applicable regulations at 6 NYCRR 362-1.5(b)(3) require a minimum 3-day storage capacity for incoming material. The Facility is designed to provide the required 3-day storage capacity for incoming biosolids. With this storage capacity, the Facility can continue to receive incoming material if the Facility goes down for a day. If the Facility cannot be returned to service, the Feedstock Supply Agreement contained in the Petition for a Case-Specific Beneficial Use Determination (the "BUD Petition") requires the feedstock supplier to transport feedstock to alternate disposal facilities.
- 2. Applicable regulations at 6 NYCRR 362-1.5(d) limits storage of manufactured Carbon Fertilizer<sup>TM</sup> (i.e., "residue") to the equivalent of 7 times the daily design output. The Carbon Fertilizer<sup>TM</sup> storage silos are sized to provide approximately 7 days of storage capacity to comply with the regulations. The BUD Petition includes letters of interest for end-use offtake markets for Carbon Fertilizer<sup>TM</sup>. SBS intends to aggressively market the Carbon Fertilizer<sup>TM</sup>; however, the Feedstock Supply Agreement contained in the BUD Petition allows the feedstock supplier to accept Carbon Fertilizer<sup>TM</sup> for beneficial use if SBS cannot identify sufficient offtake markets to keep up with production. In the event that the feedstock supplier cannot accept Carbon Fertilizer<sup>TM</sup> for use in composting (See Response 3), the feedstock supplier operates regional landfills that will accept the Carbon Fertilizer<sup>TM</sup> as alternate daily cover.
- 3. The Feedstock Supply Agreement in the BUD Petition allows the feedstock supplier to accept Carbon Fertilizer<sup>TM</sup> for beneficial use. During Facility startup, SBS intends to manage Carbon Fertilizer<sup>TM</sup> at Casella's Grasslands facility located in Chateaugay, NY as an amendment to their composting operation. The Grasslands facility is authorized to receive the sourced biosolids that will be directed to the SBS Facility. Casella will work with NYSDEC if specific additional authorizations are needed. If NYSDEC will not allow the receipt of Carbon Fertilizer<sup>TM</sup> at the Grasslands facility, Casella will accept Carbon Fertilizer<sup>TM</sup> at their regional landfills as alternate daily cover until initial testing is completed to confirm the guaranteed analysis. A letter from Casella has been added to Appendix E of the BUD Petition.
- 4. Appendix D of the BUD Petition has been updated to remove reference to a percentage of biosolids being exported due to continuously changing conditions. The most recent Draft New York State Solid Waste Management Plan states that 19% of biosolids are exported for disposal.
- The BUD Petition has been updated to include laboratory analytical data for Carbon Fertilizer<sup>TM</sup>
  produced from bench scale testing. The laboratory data supports the claimed achievable guaranteed
  analysis.

With this submission, we respectfully request a meeting with NYSDEC to review the project's permit application status. Please contact me should you have any questions or comments.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

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Vice President

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