

**RESOLUTION TO DENY SITE PLAN APPROVAL
SARATOGA BIOCHAR SOLUTIONS, LLC**

WHEREAS, Saratoga Biochar Solutions, LLC (hereinafter “Applicant”) has made an application to the Town of Moreau Planning Board (hereinafter “Planning Board”) for site plan approval pursuant to Article VI Site Plan of the Town of Moreau Code, for a carbon fertilizer manufacturing facility to be located at 2-6 Electric Drive, tax map numbers 50.-4-16 and 50.-4-22, within the Moreau Industrial Park, the development area comprising 5.89+/- acres, zoned M-1 General Manufacturing and Industrial (hereinafter the “proposed Project”); and

WHEREAS, the project is the first of its kind and its impacts, including impacts on the land, air and water of our community, are consequently difficult to quantify and assess;

WHEREAS, the project warrants careful review to protect our community’s health and welfare and that the community can rely on our findings;

WHEREAS, the project continues to undergo review by the NYS Department of Conservation (DEC), which is presently considering a Solid Waste Management Facility Permit application dated October 21, 2021, an Air Facility Permit application dated June 13, 2022, and a Beneficial Use Petition dated March 29, 2022;

WHEREAS, the Board has determined to deny approval of the site plan offered by the Applicant (the Approval Set Documents Dated March 30, 2022, prepared by studioA Landscape Architects + Engineering LLC, for the Applicant), based on the information set forth below;

- Saratoga Biochar will process up to 15% of the biosolids generated in the State of New York. According to the Applicant’s Beneficial Use Petition, the biosolids will be sourced from New York City, Long Island, Western Connecticut, Western Massachusetts, and the Hudson Valley. See Attachment A.
- Biosolids (also known as dewatered municipal sewage) are known to contain numerous contaminants, including Per- and Polyfluoroalkyl Substances (PFAS), heavy metals and dioxins.
- The importation to the Town of Moreau of such disproportionately large quantities of biosolids puts the Town at risk of disproportionately large negative impacts from the contaminants in biosolids. The project may reduce harmful contamination elsewhere but will introduce new sources to Moreau and surrounding areas.
- In its Air Facility Permit application dated June 13, 2022, Applicant acknowledges that biosolids contain Per- and Polyfluoroalkyl Substances (PFAS). See Attachment B for an excerpt from the permit application.

- The Applicant confirmed in its Air Facility Permit Application that that PFAS may not be destroyed by the biochar process and has sought permission to allow PFAS to be emitted into the air. See Attachment B.
- If PFAS might be introduced via air emissions, PFAS from biosolids processed by the project may also be discharged into the public sewer system or otherwise released into the environment.
- EPA published a research brief in which it noted that “The high temperatures and residence times achieved by pyrolysis or gasification followed directly by combustion of the hydrogen-rich syngas stream in a thermal oxidizer (or afterburner) could potentially destroy PFAS by breaking apart the chemicals into inert or less recalcitrant constituents. However, this mechanism, as well as evaluation of potential products of incomplete destruction, remain a subject for further investigation and research.” For a copy of the report, see https://www.epa.gov/sites/default/files/2021-01/documents/pitt_research_brief_pyrolysis_final_jan_27_2021_508.pdf
- Even the Applicant notes that the technology is “evolving.” See Attachment B.
- PFAS is a class of “forever chemicals” that are known to increase health risks, including cancer, autoimmune disease, cardiovascular disease and low birth weight. Both the US Environmental Protection Agency and the DEC recognize these risks and the challenges to addressing them. See <https://www.dec.ny.gov/chemical/108831.html> and <https://www.epa.gov/pfas/our-current-understanding-human-health-and-environmental-risks-pfas>.
- The DEC currently regulates the air emissions of PFOA, only one of thousands of known PFAS. Per the Applicant’s Air Facility Permit Application, the Applicant would be permitted to emit PFOA up to an AGC of 5.3×10^{-3} . Yet, “NYSDEC recognizes that many PFAS contaminants are persistent, bioaccumulative, and toxic. However, it is highly unlikely that the robust data sets needed for NYSDOH to establish health based AGC values for all these contaminants will exist in the near future using traditional risk assessment practices.” .” See “Assessment of Public Comments, Proposed DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants under Part 212, Comments received from January 13, 2021 – February 12, 2021.”
- In March 2017, the DEC added perfluorooctanoic acid (PFOA-acid, Chemical Abstracts Service (CAS) No. 335-67-1), ammonium perfluorooctanoate (PFOA-salt, CAS No. 3825-26-1), perfluorooctane sulfonic acid (PFOS-acid, CAS No. 1763-23-1), and perfluorooctane sulfonate (PFOS-salt, CAS No. 2795-39-3) (also collectively referred to within as PFOA and PFOS) to the list of hazardous substances at 6 NYCRR Section 597.3.

- In enacting this new rule, the DEC concluded that “these substances meet the definition of hazardous substances based upon the conclusion of New York State Department of Health (NYSDOH) that prolonged exposure to significantly elevated levels of these compounds can affect health and, consequently, pose a threat to public health in the State when improperly treated, stored, transported, disposed of, or otherwise managed. The Department also concluded that these substances meet the definition of hazardous substances based upon a Department ecotoxicologist’s identification of these compounds as potential hazards to the environment.” See Regulatory Impact Statement at https://www.dec.ny.gov/docs/remediation_hudson_pdf/part597erris.pdf
- On June 14, 2022, the EPA has issued guidance substantially reducing the limits on safe concentrations of PFAS in drinking water, due to concerns that higher concentration would increase health risks, including cancer, low birth weight, autoimmune disease, and cardiovascular disease. EPA recommends limits of .004 ppt of PFOA and .02ppt PFOS (as compared to prior advisory of 70 ppt). See <https://www.govinfo.gov/content/pkg/FR-2022-06-21/pdf/2022-13158.pdf>
- Town of Moreau’s Water Quality Report for 2021 shows water sourced from Saratoga County Water Authority exceeds these new limits PFOA 0.612 and PFOS 0.504 ppt. See Page 4 of <https://www.townofmoreau.org/Water/AnnualWaterQualityReport.pdf>
- According to the EPA guidance, steps should be taken now to reduced PFAS in water supplies that exceed these limits.
- The Applicant’s Environmental Assessment Form indicates that the project may result in odors for more than one hour per day. The Applicant does not represent that there will be no odor, but that it will be better than a landfill.
- The DEC imposes no specific limitations or restrictions to ensure that the odors are not offensive. Rather, the permits are enforced in accordance with the limits on specific air emissions (some of which may produce an odor) and maintenance of equipment and operations intended to “mitigate” odors. See Draft Air Permit.
- The project presents unique fire risks associated with the storage and handling of biochar on site as noted in the water engineering report dated March 30, 2022, and the applicant’s revised Air Facility Permit Application. Biochar stored in silos are highly combustibile, requiring the use of liquid nitrogen to deprive the silos of oxygen.
- Per the revised Air Facility Permit application (June 13, 2022),
 - the project may be permitted to emit Nitrogen Dioxide (up to 100 tons per year);
 - liquid nitrogen will be stored on site for purging oxygen from biochar storage silos to minimize risk of combustion; and

- the project will entail the on-site storage of debris retrieved from the biosolids.
- Per the attachments to the Solid Waste Management Permit Application (October 22, 2021 – Facility Manual), the project may receive and store on site unauthorized waste, including radioactive and hazardous waste. See Attachment C.
- A project similar to the Applicant’s project is proposed to be situated in Taunton, MA and has undergone the equivalent of NY’s EIS. In response to the draft EIS, the Massachusetts environmental agencies determined that they will not proceed further with the proposed project until the applicant puts a similar plant into operation in New Jersey and presents data regarding the actual outputs of that plant, including PFAS. See Attachment D for excerpts from Mass EPA DEIR Certificate dated May 25, 2022.
- The Applicant has indicated that it would comply with new regulations that are adopted after issuance of DEC permits. As a practical matter, DEC generally does not require existing permitted projects to comply with new regulations until their permits come up for renewal. So, although EPA and DEC may soon adopt more stringent regulations of PFAS, the Applicant may avoid compliance with those new rules for up to 10 years. The consequences to the community over that time could be devastating and irreversible.
- Lastly, the import of municipal sewage from outside of the Town of Moreau would violate Title 92 of the Town Code, which prohibits the import of materials deemed hazardous by the DEC. As noted above, the DEC has designated certain PFAS to be hazardous.
- In sum, the substantial, irreversible negative impacts from the contaminants that this project may introduce to our environment pose an unacceptable threat to the health safety and general welfare of our residents and adjoining communities. Accordingly, approval of the site plan must be denied.

IN VIEW OF THE FOREGOING, THE BOARD HEREBY resolves to deny approval of the site plan for this project in the interest of protecting the health, safety and general welfare of town residents.