

Andrew Millspaugh

From: Magee, Beth A (DEC) <beth.magee@dec.ny.gov>
Sent: Thursday, January 20, 2022 1:44 PM
To: Raymond Apy; Andrew Millspaugh
Cc: Wood, Kevin (DEC); White, Katelyn M (DEC); Sundberg, Mike (DEC)
Subject: DEC Application # 5-4144-00187/00001: Saratoga Biochar Solutions, LLC: Moreau (T)

Good afternoon.

Staff with our Division of Materials Management have reviewed the referenced Solid Waste Management permit application and provide the following comments. Please update the application documents to address the following:

1. How will the scalper overs be removed, stored and disposed?
2. What are the dimensions of the sludge receiving pits?
3. What are the size(s) of the vertical carbon silos?
4. Please include the following: equipment sizes and specifications, system descriptions and standard operating procedures, including startup and scheduled and unscheduled shutdown procedures. Identify the key operating parameters that will be monitored in the control room and what the normal operating ranges will be. Describe the actions to be taken in response to significant interruptions to the facility's normal operations.
5. Identify the specific biosolids source(s) and provide letters of interest and the required analytical data from those sources.
6. How will varying biosolids moisture contents affect the operation? Specifically, what operating parameters will be monitored and adjusted to account for this?
7. Please follow-up with the Division of Water on any required stormwater / MSGP permitting that may be necessary, and follow-up with the City of Glens Falls POTW to ensure compliance with their industrial pre-treatment program.
8. Provide written communication with disposal facilities agreeing to provide contingency disposal of biochar not meeting standards and excess biosolids which may need to be removed during unexpected downtime.
9. Indicate which methods will be used to demonstrate the pathogen and vector attraction reduction criteria will be met, and the monitoring and testing that will occur to demonstrate compliance.
10. Provide specifics on inbound and outbound material testing - who will perform it, what parameters will be included, what frequency, how will it be recorded and tracked to shipments, etc.?
11. List the wood waste types prohibited from acceptance at the facility in your waste control plan.
12. Provide the sources of your unit costs for your closure cost estimates.
13. There's a potential for PFAS compounds to be present in the inbound biosolids. Please explain what the fate of those compounds will be through the process and whether they'll remain in the product.
14. Provide a marketing and distribution plan for the biochar fertilizer identifying: 1) specific end users by written letters of intent, 2) categories of users and approximate quantity of product each user is expected to take (i.e. landscapers, farmers, etc.), 3) the frequency and method(s) of distribution, and 4) provisions in place for periods when marketing is limited (i.e. winter)?
15. The storage capacities for inbound and outbound materials at the facility should be provided.
16. Please submit a BUD petition for the biochar end use(s).
17. Provide letters of interest from potential wood sources.
18. Sheet No. A101 depicts a product bagging area and two fertilizer silos which are not discussed in the engineering report. Please include descriptions of these operations. The silo storage of dried biosolids has led to fires at other facilities. If silos are to be used, the controls that will be used to minimize fire risk and actions that will be taken if fires occur must be described.
19. The dust control provisions should include a discussion of dust from the storage and loading of the biochar product.
20. Provide a product information sheet for the fertilizer which includes recommended use, application rates, etc.

21. Page 19 of the engineering report states: “In summary, the carbon fertilizer manufacturing process potentially achieves a negative carbon footprint based on 1) replacing chemical fertilizers, 2) decreasing biosolids hauling,...”. Please explain further item 2, how hauling to the Biochar facility is different from hauling the biosolids to other facilities.
22. Part 362-1.4(a)(1)(ii) requires a summary of the pressure, temperature, and pounds per hour of all steam to be generated and used at the facility be described. It is understood that the facility won’t generate steam, but it will generate syngas. Please include a summary of the pressure, temperature, and pounds per hour of all syngas to be generated and used at the facility.
23. Please provide estimates of how much natural gas and electricity will be consumed from the operation.
24. Provide final engineering drawings and P&IDs stamped by a New York State licensed professional engineer.

Please be reminded that the DEC Division of Air also provided technical comments on this permit application via email on 12/1/21 and that the application is currently incomplete pending the SEQR determination by the Town Planning Board.

Please feel free to contact me with any questions.

Thank you,

Beth A. Magee

Deputy Regional Permit Administrator, Division of Environmental Permits

New York State Department of Environmental Conservation
232 Golf Course Road, Warrensburg, NY 12885
P: (518) 623-1283 | F: (518) 623-3603 | beth.magee@dec.ny.gov
www.dec.ny.gov | | |

Total Control Panel

[Login](#)

To: andrew.millspaugh@sterlingenvironmental.com [Remove](#) this sender from my allow list
From: beth.magee@dec.ny.gov

You received this message because the sender is on your allow list.