

SARATOGA COUNTY SEWER DISTRICT NO. 1 PRETREATMENT PROGRAM

**WASTEWATER DISCHARGE PERMIT APPLICATION
AND/OR BASELINE MONITORING REPORT
AND/OR QUESTIONNAIRE FOR INDUSTRIAL DISCHARGES**

GENERAL INFORMATION

Company Name: Saratoga Biochar Solutions, LLC

Mailing Address: 26F Congress Street #346, Saratoga Springs, NY 12866

Address of Premises: Farnan Road within the Moreau Industrial Park, Town of Moreau, NY
Tax Map IDs 50.-4-22 and 50.-4-16

Standard Industrial Classification Code (SIC): 3999 - Manufacturing Industries

Name and Title of Signing Official: Raymond Apy, Chief Executive Officer

Contact Official

Name: Raymond Apy

Title: Chief Executive Officer

Address: 26F Congress Street #346
Saratoga Springs, NY 12866

Telephone: 518-391-0566

**** Please read Attachment A before signing below ****

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete and that the sampling and analysis is representative of normal work cycles and expected pollutant discharges to the POTW. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

9/2/2022
DATE


SIGNATURE OF AUTHORIZED REPRESENTATIVE

PLANT OPERATIONAL CHARACTERISTICS (use additional sheets if necessary)

1. Brief description of production, manufacturing or service activities on premises:

The solid waste management facility will manufacture a Class A carbon fertilizer

from feestock consisting of primarily biosolids sourced from wastewater treatment plants.

The manufacturing process implements drying and pyrolysis to produce the carbon fertilizer.

for use as soil fertilizer.

2. List the principal products or services with the appropriate 4 digit Standard Industrial Classification Code:

3999 - Manufacturing Industries

3. Principal materials (raw materials, catalysts, intermediates) used in activities listed in question 1:

Biosolids sourced from wastewater treatment plant; wood as a minor feedstock for moisture

control.

4. Please indicate below the following information for each product:
- Type of production, batch or continuous (or both)
 - If batch, the average number of batches / 24 hours
 - The average monthly production of each product

Product Name	Production	Number of Batches/ 24 hours	Average Monthly Production
<u>Carbon Fertilizer</u>	<u>Continuous</u>	<u>N/A</u>	<u>2083 tons/mon (25,000tons/yr)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

5. Is there a scheduled shutdown(s)?

If yes, when? Operational downtime is scheduled at 5% for scheduled maintenance.

For what time period? 5% of operational time

Is Production seasonal? No, operations will run 24/7

If yes, explain, indicating productional season month(s) of peak production

N/A

9. Describe any raw water treatment processes in use:

N/A, the facility will be connected to municipal water supply

10. List water consumption in plant:

Consumption
(Indicate Units)

City Wastewater Sewer 960 GPD (Office restrooms)

Natural Outlet _____

Waste Hauler _____

Evaporation _____

Contained in Product _____

Other (in process consumption) 29,119 GPD

11. List average daily volume of discharge or water loss to:

Average Daily
Discharge or Loss
(indicate units)

City Wastewater Sewer 29,456 GPD

Natural Outlet _____

Waste Hauler _____

Evaporation _____

Contained in Product 1,363 GPD

Other _____

12. Number of separate production buildings at this site:

One Building
(to be constructed in 3 phases)

WASTEWATER DISCHARGE AND TREATMENT

13. Please attach a detailed map of the plant site and show all production buildings and plant sewer outlets. Also list below for each outlet the size of the pipe and approximate average daily wastewater flow.

<u>Outlet Name or Number*</u>	<u>Sewer Outlet Size (inches)</u>	<u>Avg. Daily Flow (indicate units)</u>
<u>Outfall No. 1</u>	<u>6 in. dia.</u>	<u>29,456 GPD</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
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* Reference the outlet name or number to the site map. If unknown, please indicate.

14. Are the wastewater discharges:

a. Discharged during production? If so: Intermittent Continuous

b. Discharged after production (example: clean-up, floor or tank washing)?

If so: Intermittent Continuous

15. Does your firm have a Federal Pretreatment Standard for your plant?

If so, are pretreatment standards being met?

16. Describe any wastewater treatment equipment and processes currently in use:

No wastewater treatment is proposed; volume contributing to the wastewater discharge stream are a result of air treatment processes including Sulfur dioxide scrubber, Bioscrubber and Venturi Scrubber.

If so, please indicate in the space provided:

- a. Whether the waste is a by-product
- b. The annual amount of wastes produced
- c. The approximate loss of the waste to the sewer
- d. The approximate accidental loss of the waste to the sewer
- e. The average amount of the wastes stored on site

	A	B	C	D	E
Acidic & Alkaline Substances	Yes	640 tons/year	10% (64 tons/year)	0	N/A
Oil & Grease	_____	_____	_____	_____	_____
Corrosive Wastes	_____	_____	_____	_____	_____
Other Metal Bearing Wastewater	_____	_____	_____	_____	_____

19. If your firm has had the wastewaters analyzed to determine pollutant concentrations please indicate in Table 2 the average wastewater characteristics for all samples seen and analyzed for each connection to the sewers. If available, a copy of the laboratory analyses may be attached instead of filling out Table 2. If the plant has more than one connection fill out additional sheets. One for each connection. (see attached wastewater profile specifications sheet)

For each connection for which wastewater characteristic data have been measured indicate in Table 2:

- a. The method of sampling (composite, flow weighted composite, or grab)
- b. The duration of any composite sampling _____
- c. The date(s) the samples were taken _____
- d. Name of laboratory which did the analysis _____

ATTACHMENT A

According to EPA regulations [40 CFR 403.12 (1)] signatories must be of sufficient stature as to enable the Sewer District to hold the facility legally responsible for the representations made in this permit application and subsequent compliance reports.

- (A) By a responsible corporate officer, if the industrial user submitting the reports is a corporation. For the purposes of this paragraph, a responsible corporate officer means:
 - I. A president, secretary, treasurer or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy- or decision-making functions for the corporation, or:
- (B) By a general partner or proprietor if the industrial user submitting the reports is a partnership or sole proprietorship respectively.
- (C) The principal executive officer or director having responsibility for the overall operation of the discharging facility if the industrial user submitting the reports is a Federal, State or local government entity, or their agents.
- (D) By a duly authorized representative of the individual designated in paragraph A, B, or C of this section if:
 - I. The authorization is made in writing by the individual designated in paragraph A, B or C;
 - II. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - III. The written authorization is submitted to the Sewer District.
- (E) If an authorization under paragraph D of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph D of this section must be submitted to the Sewer District prior to or together with any reports to be signed by an authorized representative.

Providing Essential Services – Manufacturing Carbon Fertilizer – Benefiting Host Communities & Environment

SBS Water & Wastewater Requirements

Note: SBS intends to recycle the wastewater from the ammonia scrubber into the carbon fertilizer to avoid nutrient discharge to the sewer. The wastewater replaces water that would otherwise be consumed from the municipality to hydrate the carbon fertilizer.

SBS Water					
	Phase 1	Phase 2	Phase 3	Total	Units
Process	368	368	368	1,103	GPH
Venturi Scrubber	259	259	259	778	GPH
Sulfur Dioxide (SO ₂) Scrubber	74	74	74	223	GPH
Ammonia (NH ₄) Scrubber	13	13	13	39	GPH
Bioscrubber	21	21	21	63	GPH
Office	30	5	5	40	GPH
Truck Wash	60	25	25	110	GPH
Total, hourly	458	398	398	1,253	GPH
Total, daily	10,986	9,546	9,546	30,079	GPD

SBS Wastewater					
	Phase 1	Phase 2	Phase 3	Total	Units
Process	391	391	391	1,174	GPH
Venturi Scrubber					
Discharge	259	259	259	778	GPH
Dust (biosolids)	2.2	2.2	2.2	6.7	lbs/h
Sulfur Dioxide (SO ₂) Scrubber					
Discharge	92	92	92	276	GPH
Calcium Sulfite CaSO ₃ ·x(H ₂ O)	147	147	147	440	lbs/h
Ammonia (NH ₄) Scrubber					
Discharge	19	19	19	57	GPH
Ammonium Sulfate (NH ₄) ₂ SO ₄	49	49	49	146	lbs/h
Bioscrubber					
Discharge	21	21	21	64	GPH
Office	25	5	5	35	GPH
Truck Wash	25	25	25	75	GPH
Total, hourly	441	421	421	1,284	GPH
Total, daily	10,593	10,113	10,113	30,819	GPD
Total, minus NH₄ Scrubber, hourly	422	402	402	1,227	GPH
Total, minus NH₄ Scrubber, daily	10,139	9,659	9,659	29,456	GPD