



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:											
Lined MSWLF		LCID		YW		Transfer		Compost	<input checked="" type="checkbox"/>	SLAS	COUNTY: Chatham PERMIT NO.: 19-05 FILE TYPE: COMPLIANCE
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM	
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF	

Date of Site Inspection: January 12, 2015

Date of Last Inspection: February 20, 2014

FACILITY NAME AND ADDRESS:

Brooks Compost Facility – Large, Type 3 Solid Waste Compost Facility
 1195 Beal Road
 Goldston, NC 27252

GPS COORDINATES: N: 35.54431 E: -79.36780

FACILITY CONTACT NAME AND PHONE NUMBER:

Amy Brooks, Assistant Site Manager - Brooks Contractor
 w. 919-837-5914
 f. 919-837-5097
 c. 919-842-6063
amy@brookscontractor.com
www.brookscontractor.com

FACILITY CONTACT ADDRESS:

Brooks Contractor
 Amy Brooks, Assistant Site Manager
 1195 Beal Road
 Goldston, NC 27252

PARTICIPANTS

John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS)
 Amy Brooks, Assistant Site Manager - Brooks Contractor
 Alan Brooks, Site Manager - Brooks Contractor

STATUS OF PERMIT:

Permit To Operate (PTO) issued January 22, 2010
 PTO expiration date January 22, 2015

PURPOSE OF SITE VISIT:

Comprehensive Inspection

STATUS OF PAST NOTED VIOLATIONS

None

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OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may also be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

On January 12, 2015, John Patrone met with Amy Brooks and Alan Brooks to conduct a comprehensive inspection of the Brooks Compost Facility – Large, Type 3 Solid Waste Compost Facility on Beal Road in Goldston, Chatham County.

1. The facility is a Large, Type 3 Solid Waste Compost (SWC) Facility. It produces compost from eggshell/hatchery waste, food waste (pre-consumer and post-consumer), yard waste (primarily leaves), wood mulch, animal bedding, grease trap waste, etc. (as listed on page 5 of the current Facility Operations & Maintenance Manual) and additional materials approved by the Solid Waste Section (SWS).
2. Material is received from numerous counties within North Carolina.
3. The facility permit, site map, and operations plan were discussed.
4. The facility is in operation Monday through Friday 7:00 am to 5:00 pm and Saturday 8:00 am to 12:00 pm (March through November).
5. The compost produced is primarily sold to construction and landscape contractors, farmers, and landscape supply businesses.
6. Compost may be mixed with sand, pine bark fines, PermaTill, or per custom blend formula.
7. Liquid material is dumped into a bulking and mixing pit. Solids with a high concentration of liquid are placed on an adjacent concrete pad.
8. Liquid material is mixed with absorbent bulking material and placed on the concrete pad.
9. The concrete pad contains drain grates. The leachate is directed to the bulking and mixing pit or to two 3,500 gallon concrete storage tanks.
10. The concrete storage tanks are used to settle-out sludge and particulate material. A 10,000 gallon steel storage tank is used to store the leachate drained from the concrete tanks. The leachate is pumped-out and used on the active windrows.
11. Upon receipt, food waste is placed on the concrete pad. It is mixed with bulking material and placed in windrows.
12. Upon receipt eggshell/hatchery waste is placed in windrows. A layer of uncured compost is placed atop the windrow.
13. Active windrows are generally organized into separate operational areas: eggshell/hatchery waste and food waste.
14. The facility commonly uses leaves, cardboard, mulch, and yard waste as bulking material.
15. During the fall and winter months, the facility receives leaves from the town of Cary and Siler City.
16. Active windrows appeared to be within required dimensions. Eggshell/hatchery waste windrows are commonly 350 feet long and food waste windrows 200 feet.
17. During the inspection the facility had 40 active windrows (including “test” windrows).
18. The facility uses a windrow-turning machine to turn the active windrows. Windrows are constructed with a front end loader.
19. Active windrows are commonly maintained for 2 to 5 months during which time process to further reduce pathogens (PFRP) is met. The windrows meeting PFRP are combined into a curing pile. Material is generally cured for an additional 4 to 12 months.
20. During the inspection the facility had three curing piles/areas.

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21. Cured compost is screened prior to sale. Generally, compost is screened as needed.
22. Stockpiled finished product is limited to a height of 60 feet.
23. A vehicle scale test was conducted by NC Department of Agriculture & Consumer Services on September 25, 2014. The scale was approved.
24. A vehicle scale test was conducted by Central Carolina Scale, Inc. on October 22, 2014. Documentation stated the scale was good.
25. The facility annual report (FAR) dated July 29, 2014 was received by the SWS. Material received for July 2013 through June 2014 is 52,824.08 tons. The amount of compost created is 29,011.2 tons, the amount sold/give-away is 27,141.54 tons, and the amount stockpiled on site is 1,869.66 tons.
26. The facility maintains records of the quantity, type, and source of material received for processing. The amount of material received from July 1, 2014 through January 10, 2015 is 29,669.4 tons. The amount of compost sold from July 1, 2014 through January 9, 2015 is 10,475.7 tons. The amount of cured compost on site as of January 12, 2015 is 48,533.3 tons. The amount of leaves stockpiled on site as of January 12, 2015 is 3,913 tons (leaf tonnage is included with material received records).
27. The facility produces Grade A compost and offers an information pamphlet for customers and maintains a website.
28. The facility has three temperature probes. Temperature probe calibration records for 2014 were verified.
29. Windrow records were verified. The facility maintains records for temperature, moisture level, turning intervals, bulk density, and C:N calculation. The records observed were for windrows formed on 03/08/14 through windrows taken up on 01/02/15.
30. The windrow records document that the facility turns windrows at least five times during the high temperature period.
31. Windrow moisture level is measured by hand per the method outlined in the current Facility Operations & Maintenance Manual, pg 12.
32. The facility currently uses Green Mountain Technologies, Inc. windrow manager software. The program allows the facility to electronically maintain active windrow data, calculate windrow bulk density and C:N ratio, and record and graph data.
33. Compost shall be analyzed at intervals of every 20,000 tons or every six months, whichever comes first.
34. Compost analysis records were verified for nutrients, concentration of metals, manmade inerts, fecal coliform, and salmonella for samples taken August 14, 2014, identified as: BR-1 and BR-1F. The samples were analyzed by Soil Control Lab, Watsonville, CA. Ms. Brooks stated that additional compost analysis will be conducted in the coming weeks.
35. Ms. Brooks stated that additional nutrient sample analysis is routinely conducted by the North Carolina Department of Agriculture & Consumer Services – Agronomic Services Division. Nutrient sample analysis records were observed for July, October, and December 2014.
36. The facility has a dedicated water truck for dust control and one for irrigation.
37. There was no odor detected at the facility boundary.
38. The facility has not received an odor complaint. Mr. Brooks stated that eggshell/hatchery waste is incorporated into windrows upon receipt and commonly turned when winds are favorable.
39. Erosion and sedimentation controls appeared to function accordingly.
40. The facility has a clay-lined stormwater pond. Stormwater is pumped-out to be used in the active windrow process. The facility does not discharge stormwater from the containment pond.
41. Mr. Brooks stated that a stormwater discharge permit is not required because stormwater remains onsite.
42. Mr. Brooks stated that the stormwater pond freeboard is currently 4.5 feet.
43. The facility has received a permit to construct a containment pond irrigation system from the Division of Water Resources (DWR). A pipe extending from the stormwater containment pond will be buried underneath a portion of the active compost area to an adjacent field. When sufficient stormwater is available, the facility will have the capability to irrigate three fields with a portable irrigation sprinkler. Ms. Brooks stated that SWS – Composting & Land Application Branch has been informed about the intended project.
44. An emergency at the facility can be addressed by the Goldston Fire Department.

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- 45. Fire lanes are maintained.
- 46. The facility is secured by locked metal gate (the Brooks' residence is located at the entrance drive to the facility). Facility personnel are on site during operating hours.
- 47. Access roads are of all weather construction.
- 48. The facility has proper signage.
- 49. The PTO expiration date is January 22, 2015.
- 50. Ensure the PTO renewal application is submitted to the SWS by the expiration date. The SWS – Composting & Land Application Branch is expecting the PTO renewal application by the expiration date.

Please contact me if you have any questions or concerns regarding this inspection report.

Phone: 336-776-9673

John Patrone, Environmental Senior Specialist
Division of Waste Management, NCDENR

Sent on: <u>January 14, 2015</u>	X	Email		Hand delivery		US Mail		Certified No. []
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Electronic Copies: Deb Aja, Western District Supervisor - SWS
Sarah Rice, Compliance Officer - SWS
Tony Gallagher, Composting & Land Application Branch Head - SWS
Donna Wilson, Permitting Engineer - SWS
Liz Patterson, Environmental Technician - SWS
Alan Brooks, Brooks Contractor (alan@brookscontractor.com)

Digital pictures taken January 12, 2015
by John Patrone, DWM-SWS

Bulking and mixing pit



Solids w/high concentration of liquid on concrete pad.



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Active windrow construction



Active windrows – representative view



Stormwater retention pond and sedimentation basin



Compost curing pile No. 3



Compost curing pile/area No. 2 (left side of pic)



Compost screener

