



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:

Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: Durham PERMIT NO.: SWCD 32-01 [Demonstration] FILE TYPE: COMPLIANCE
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM		
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO	X	SDTF		

Date of Site Inspection: March 6, 2015

Date of Last Inspection: March 6, 2014

FACILITY NAME AND ADDRESS:

NewSoil Vermiculture LLC
 314 Latta Road
 Durham, NC 27712

GPS COORDINATES: N: 36.07782 E: -78.91979

FACILITY CONTACT NAME AND PHONE NUMBER:

Garry Lipscomb, Co-owner Bill Corey, Co-owner
 c. 202-374-0403 c. 857-204-9839

newsoil@nc.rr.com

w. 919-237-2219

FACILITY CONTACT ADDRESS:

NewSoil Vermiculture LLC
 314 Latta Road
 Durham, NC 27712

PARTICIPANTS

John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS)
 Garry Lipscomb, Co-owner – NewSoil Vermiculture LLC

STATUS OF PERMIT:

Solid Waste Compost Demonstration (SWCD) approved March 25, 2014
 SWCD approval period is until March 25, 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 March 6, 2015, John Patrone met with Garry Lipscomb to conduct a comprehensive inspection of the NewSoil Vermiculture LLC Solid Waste Compost Demonstration located on Latta Road in Durham, Durham County.

1. The solid waste compost demonstration (SWCD) is a vermiculture operation conducted in the basement/crawlspace of the residence located at 314 Latta Road.
2. The SWCD is considered a small, type 3 compost operation.
3. The SWCD has obtained approval to operate (SWS letter dated 3/25/14). The approval is in accordance with NC Solid Waste Management rules and 15A NCAC 13B .1409 and subject to conditions stated in the letter.
4. The SWCD has obtained approval for distribution (SWS letter dated 4/16/14).
5. The area available for the SWCD may be considered a confined space (~10'x8'x7'). The basement/crawlspace is accessed via a small door on the right side of the house.
6. There are eight 50-gallon plastic drums (Nos.: 0 through 7) that have been modified for the vermiculture operation.
7. Each drum is 22 inches wide and contains a lid. The bottom of each barrel sits in a 25 inch wide pan with 3 inch lip.
8. The barrels are ~ 2 feet up off the floor. A tarp covered wood deck atop concrete blocks supports the barrels.
9. Food scraps are obtained from the residence and stored in a small container in the kitchen.
10. Leaves are obtained from the property stored in a small pile outside.
11. Prepared rice and oats are used to augment the feedstocks.
12. The food scraps, dried leaves, and worms sit atop a metal grate inserted within each barrel.
13. Each barrel is divided into thirds. The upper 1/3 is used for feedstocks. The middle 1/3 is used for active composting, and the lower 1/3 is used to collect vermicompost that falls through the grate. An access hatch has been cut into the lower 1/3 of each barrel.
14. The vermiculture operation uses red wigglers (*Eisenia foetida*) to produce vermicompost.
15. The feed rate is currently ~ 2 lbs/barrel/week of food scraps and dried leaves.
16. Mr. Lipscomb stated that minimal leachate is obtained from the vermiculture operation. Leachate is reintroduced into the compost process as moisture.
17. The vermicompost that is collected from the barrels is generally wet. The material is placed in a 5-gallon bucket (w/drilled holes) and placed within an empty 5-gallon bucket. This method allows the liquid to filter-out from the compost product into the second bucket for reuse. The 5-gallon bucket of liquid is stored until used, covered with a snap on lid.
18. Filtered vermicompost is stored in several large plastic bags (loosely sealed), allowing it to dry for ~ 6 months.
19. Finished vermicompost is stored in 5-gallon plastic buckets (w/snap on lid) until packaged for sale.
20. The floor of the vermiculture operation has a drain that is piped to a septic tank located on the property.
21. Wood chip is available to absorb liquid. If used it will become feedstock material.
22. Feedstock records were verified for January 5, 2014 through February 22, 2015. The feed rate is ~ 10 lbs every two weeks. Records contain: date, barrel no., lbs food added, lbs leaves added, if aerated, and comments.

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23. The vermiculture operation is required to obtain test results for heavy metals (cadmium, copper, lead, nickel, and zinc) and fecal coliform. Man-made inerts are verified by Mr. Lipscomb and Mr. Corey. The vermicompost is triple-screened through ¼ inch screen.
24. Heavy metals and pathogen testing was conducted in March and September 2014 by the NCDA&CS Agronomic Division and Pace Analytical Services, Inc.
25. A copy of the label used for public distribution has been submitted to the SWS – Composting & Land Application Branch.
26. Mr. Lipscomb is to request an extension of the SWCD. He has had preliminary discussion with Tony Gallagher, Composting & Land Application Branch Head – SWS.

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>March 9, 2015</u>	X	Email		Hand delivery		US Mail		Certified No. <u> </u>
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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
 Liz Patterson, Environmental Technician - SWS

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Digital pictures taken on March 6, 2015
by John Patrone, DWM-SWS

Vermiculture operation barrels



Vermicompost in double-bucket (to filter-out liquid)



Vermicompost stored to dry



Vermicompost – finished product (to be packaged)

