North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Dexter R. Matthews
Director

John E. Skvarla, III
Secretary

June 24, 2013

Ms. Nessa Stone
NC State University Yardwaste Facility
Campus Box 7516
Raleigh, NC 27695

Re: Yard Waste Notification – Wake County
NC State University Yardwaste Facility – YWN-92-011

Dear Ms. Stone:

The Solid Waste Section has received your yard waste facility notification form. As long as your facility only processes and stores less than 6,000 cubic yards of the following materials on a quarterly basis, you can continue to operate by notifying the Section on an annual basis **by June 1st of each year**. If your composting activities grow in size to more than 6,000 cubic yards quarterly or exceed the 2 acre size limitation please contact the Solid Waste Section for assistance in obtaining a permit.

Facilities operating under notification shall only receive:

a. Untreated and unpainted wood waste.

b. "Silviculture Waste" as defined in 15A NCAC 13B.0101(41); waste materials produced from the care and cultivation of forest trees, including bark and woodchips.

c. "Yard Trash" as defined in 15A NCAC 13B .0101(55); solid waste resulting from landscaping and yard maintenance such as brush, grass, tree limbs, and similar vegetative material.

d. "Yard Waste" as defined in 15A NCAC 13B .0101(56); yard trash and land clearing debris to include stumps, limbs, leaves, grass, and untreated wood.

Facilities operating under notification are required to operate in accordance with 15 NCAC 13B .1406 and .1404(a)(1)-(10).

If you have questions, or if we can be of further assistance, please do not hesitate to contact the Regional Environmental Senior Specialist, Shawn McKee, at 919-707-8284.

Sincerely,

Martin A. Gallagher

Martin A. Gallagher, Environmental Supervisor
Composting & Land Application Branch

cc: Shawn McKee, Environmental Senior Specialist, Raleigh Central Office
Dennis Shackelford, Eastern District Supervisor, Fayetteville Regional Office
Central File, Solid Waste Section, Div. of Waste Management

S:/Solid_Waste/CLA/Compost/Yard Waste/Notifications/92-Wake/NCSU Yardwaste Facility YWN-92-011 6-24-2013

YWN-92-011

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Solid Waste Section

YARD WASTE FACILITY NOTIFICATION
(Effective February 1, 1991)

Pursuant to 15A NCAC 13B .1401 (a), this provision applies to facilities that accept, store, or produce compost or mulch from yard waste.

Pursuant to 15A NCAC 13B .1402(g)(3), the owner or operator of any Type 1 Solid Waste (yard waste) facility which occupies less than two acres of land and processes and stores less than 6,000 cubic yards of material quarterly shall **submit this form to the Department by June 1st of each year**.

****If a facility is planning to accept waste that is generated by a disaster (e.g. hurricane) /*and*/ the facility, contractor, hauler, etc. wishes to apply for a FEMA reimbursement for managing or disposing of the waste, the facility must be pre-approved to manage or dispose of disaster generated waste. If you have questions concerning this issue or to begin the approval process contact your area Environmental Senior Specialist as soon as possible. Contact information for the Environmental Senior Specialist can be found at http://portal.ncdenr.org/web/wm/sw/ under the staff maps heading (Field Operations Branch). The approval process may take up to several months. Therefore, to avoid unnecessary delays pre-approval (i.e. prior to a disaster event) of a facility is highly recommended. ****

INSTRUCTIONS

Purpose: Notification of yard waste facility sites is required by 15A NCAC 13B .1402(g)(3). A permit is required for facilities storing and processing more than 6,000 cubic yards of material quarterly. Contact the Solid Waste Section at the address below for more information.

Distribution: Mail completed **ORIGINAL** form to the following address:

Division of Waste Management
Composting & Land Application Branch
1646 Mail Service Center
Raleigh, North Carolina 27699-1646
(919) 707-8200

1. Facility Name: NC State University Yardwaste Facility

2. **INCLUDE AN AERIAL PHOTOGRAPH OF THE SITE**
   - **With a scale of 1inch=400 feet or less**
   - **Must show the area around the proposed facility for at least 1/4th mile**
   - **Photographs are available from most county tax or planning offices**

   Directions to Facility location (main entrance): Tryon Rd and Lake Wheeler Rd Intersection - south on Lake Wheeler, left on Inwood Rd, left on gravel road, follow to end of gravel road.

   City: Raleigh County: Wake Zip: 27603

   The land on which this facility is located is described in the deed recorded in:

   Deed Book: 04041 **Page:** 0555 **County:** Wake

3. Name of site operator (i.e. a person who operates the facility and will attend the audits): NC State University, DCS, Nessa Stone.

4. Mailing address of site operator: CB 7516

   City: Raleigh State: NC Zip: 27695

5. Telephone number of site operator: ( )919-515-9421 Email: recycling@ncsu.edu

6. Name of property owner (if different): State Of North Carolina

7. Mailing address of owner: State Property Office - 116 W Jones St.

City: Raleigh State: NC Zip: 27603-1300

8. Telephone number of owner: ( ) Email:

9. Type of waste received [i.e., leaves, grass clippings, land clearing debris (stumps, etc.)]: Leaves, landscape shrub clippings, grass clippings. Designated as FEMA disaster debris site, will accept wood or tree debris in event of large storm damage.

10. Amount of waste received quarterly: Less than 100 tons (annually) or 25 tons quarterly.

11. Amount of waste removed quarterly: (**note: No more than 6,000 cubic yards of material can be stored on site per quarter at a yard waste notified site.)** 5-10 tons quarterly. Increases to 15-25 in mulch season;Feb-May.

12. Description of composting process to be used: **(*The description of the compost process must minimally include formation of windrows or annual turning of leaves (i.e. passive composting). If additional processing is done, explain briefly; i.e., usage of tub grinder, monthly aeration, etc.). Please note if you are composting pursuant to 15A NCAC 13B .1406 (10) temperature records must be maintained that show at least 131 degrees F was maintained for three days so as to meet minimum pathogen reduction requirements before final compost is distributed. These records must be maintained and presented to the field inspector upon request.**

Leaves, clippings and chipped yard waste - stored in rows 4'-6' height, turned 4-6 times per year.

13. Description of mulching process: **(*The description of the mulching process must minimally include a description of the process, usage of a tub grinder, etc. Also, explain if the mulching operation will include "yard trash" other than "high carbon nitrogen" material as described in North Carolina General Statute 130A-290(45). If so, include under item 14 of this application the intended distribution of the final product. Additionally, only untreated wood and non-engineered wood / wood products can be mulched at a facility that has a yard waste notification.**

The described yard waste is chipped and placed in rows. The rows are turned approximately six times per year using a wind row turner.

14. Intended distribution of finished product: (*Explain briefly how the compost or mulch from your site is to be used. **Notified sites are not approved for permanent storage**.)

Final product is used on campus grounds as a mulch, or as a soil amendment in flower beds.

15. Rules: Review the rules that apply to a Yard Waste Notification and sign the Certification statement in #15.

.1401 REQUIREMENT FOR PERMIT

(a) All persons whose purpose is or includes the production of compost from solid waste or solid waste co-composted with other wastes shall not construct, operate, expand or modify a facility until a currently valid permit for a solid waste compost facility is issued by the Division. **This provision also applies to facilities that accept, store, or produce compost or mulch from yard waste or from residues from agricultural products and processing.** General Provisions, siting, design, application, operational, distribution, and reporting requirements shall be in accordance with Rules .1402, .1403, .1404, .1405, .1406, .1407, and .1408 of this Section.

.1402 GENERAL PROVISIONS FOR SOLID WASTE COMPOST FACILITIES

(g) A permit is not required for the following operations:

(3) Small Type 1 Facilities meeting the following conditions:

(A) Notification of the Solid Waste Section prior to operation and on an annual basis as to:

(i) Facility location;

(ii) Name, address and phone number of owner and operator;

(iii) Type and amount of wastes received;

(iv) Composting process to be used; and

(v) Intended distribution of the finished product.

(B) Agreement to operate in accordance with operational requirements as set forth in Rule.1406 and the setbacks in Rule .1404(a)(1) - (10) of this Section.

(C) Facility operates in accordance with all other state or local laws, ordinances, rules, regulations or orders.

(D) Facility is not located over closed-out disposal site.

(E) Safety measures are taken to prevent fires and access to fire equipment or fire fighting services is provided.

History Note: Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29; Eff. December 1, 1991; Amended Eff. May 1, 1996.

.1404 SITING/DESIGN REQUIREMENTS FOR SOLID WASTE COMPOST FACILITIES

(a) A site shall meet the following requirements at the time of initial permitting and shall continue to meet these requirements throughout the life of the permit only on the property owned or controlled by the applicant or by the landowner(s) at the time of permitting:

(1) A site located in a floodplain shall not restrict the flow of the 100-year flood; reduce the temporary storage capacity of the floodplain; or result in washout of solid waste so as to pose a hazard to human life, wildlife, land or water resources;

(2) A 100-foot minimum buffer is required between all property lines and compost areas for Type 3 and 4 facilities, 50-foot for Type 1 or 2 facilities;

(3) A 500-foot minimum buffer is required between compost areas and residences or dwellings not owned and occupied by the permittee, except that Type 1 and Small Type 2 and 3 facilities shall have a 200-foot minimum buffer;

(4) A 100-foot minimum buffer is required between all wells and compost areas, except monitoring wells;

(5) A 50-foot minimum buffer is required between perennial streams/rivers and compost areas;

(6) A compost facility shall be located in accordance with 15A NCAC 2B .0200, Classification and Water Quality Standards Applicable to Surface Waters in North Carolina;

(7) All portions of any compost facility located over a closed-out disposal area shall be designed with a pad adequate to protect the disposal area cap from being disturbed, as defined in Part (a)(10)(E) of this Rule, and there shall be no runoff from the pad onto the cap or side slopes of the closed out area;

(8) A 25-foot minimum distance is required between compost areas and swales or berms to allow for adequate access of fire fighting equipment;

(9) A site shall meet the following surface water requirements:

(A) A site shall not cause a discharge of materials or fill materials into waters or wetlands of the state that is in violation of Section 404 of the Clean Water Act;

B) A site shall not cause a discharge of pollutants into waters of the state that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES), under Section 402 of the Clean Water Act; and

(C) A site shall not cause non-point source pollution of waters of the state that violates assigned water quality standards;

(10) A site shall meet the following groundwater requirements:

(A) A site shall not contravene groundwater standards as established under 15A NCAC 2L;

(B) Portions of a site used for waste receipt and storage, active composting, and curing shall have a soil texture finer than loamy sand and the depth to the seasonal high water table shall be maintained at least 12 inches for a Type 1 or 2 facility and 24 inches for a Type 3 facility, unless a pad is provided;

(C) A pad shall be provided for portions of a Type 4 facility used for waste receiving and storage, active composting, and curing;

(D) A pad is not required for storage of finished product that is dried so as to pass the Paint Filter Liquids Test (EPA Method 9095), and for which the storage area is prepared in such

a manner that water does not collect around the base of the stored material, and where the depth to the seasonal high watertable is maintained at least 12 inches; and

(E) The linear coefficient of permeability of pads required in accordance with this Rule shall not be greater than 1 x 10(-7) centimeters per second. If natural soils are used, the liner must be at least 18 inches thick.

(b) For Subparagraphs (a)(2) through (a)(4) and Part (a)(10)(B) of this Rule, (dependent upon waste type, facility design, and regional topography) alternative minimum buffers or requirements may be increased if deemed necessary by the Division in order to protect public health and the environment or to prevent the creation of a nuisance.

(c) A site shall meet the following design requirements:

(1) A site shall not allow uncontrolled public access;

(2) A site shall meet the requirements of the Sedimentation Pollution Control Law (15A NCAC 4);

(3) A site shall meet the requirements of the Air Pollution Control Requirements (15A NCAC 2D) to minimize fugitive emissions and odors; and

(4) A site shall be designed to minimize odors at the property boundary.

History Note: *Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29; Eff. December 1, 1991; Amended Eff. May 1, 1996.*

.1406 OPERATIONAL REQUIREMENTS FOR SOLID WASTE COMPOST FACILITIES

Any person who maintains or operates a solid waste compost facility shall maintain and operate the site to conform with the following practices:

(1) Plan and Permit Requirements:

(A) Construction plans and conditions of permit shall be followed; and

(B) A copy of the permit, plans, and operational reports shall be maintained on site at all times.

(2) Adequate erosion control measures shall be practiced to prevent on-site erosion and to control the movement of soil or contaminants from the site.

(3) Surface water shall be diverted from the operational, compost curing, and storage areas.

(4) Leachate shall be contained on site or treated to meet the standards of the off-site disposal method.

(5) Access and Security Requirements:

(A) Large sites shall be secured by means of gates, chains, berms, fences, or other security measures demonstrated to provide equivalent protection approved by the Division, to prevent unauthorized entry.

(B) An operator shall be on duty at the site at all times while the facility is open for public use to ensure compliance with operational requirements and access to such facilities shall be controlled.

(C) The access road to the site shall be of all-weather construction and maintained in good condition.

(6) A site shall only accept those solid wastes that it is permitted to receive.

(7) Safety Requirements:

(A) Open burning of solid waste is prohibited.

(B) Equipment shall be provided to control accidental fires and arrangements made with the local fire protection agency to immediately provide fire-fighting services when needed.

(C) Personnel training shall be provided to insure that all employees are trained in site specific safety, remedial, and corrective action procedures.

(8) Sign Requirements:

(A) Signs providing information on waste that can be received, dumping procedures, the hours during which the site is open for public use, the permit number and other pertinent information shall be posted at the site entrance.

(B) Traffic signs/markers shall be provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.

(C) Signs shall be posted stating that no hazardous waste, asbestos containing waste, or medical waste can be received at the site.

(9) Monitoring Requirements:

(A) Specified monitoring and reporting requirements shall be met.

(B) The temperature of all compost produced shall be monitored sufficiently to ensure that the pathogen reduction criteria is met.

(10) Compost process at Type 1 facilities shall be maintained at or above 55 degrees Celsius (131 degrees F) 3 days and aerated to maintain elevated temperatures.

(11) Types 2, 3 and 4 facilities shall maintain the compost process at a temperature above 40 degrees Celsius (104 degrees F) for 14 days or longer and the average temperature for that time shall be higher than 45 degrees Celsius (113 degrees F) or, Types 2, 3 and 4 facilities shall meet the vector attraction reduction requirements in 40 CFR 503.33(b)(4) or (7). Requirements of 40 CFR 503.33(b)(4) and (7) are hereby incorporated by reference, including any subsequent amendments or additions.

(12) The composting process shall qualify as a process to further reduce pathogens for all Type 3 and Type 4 facilities. The following are acceptable methods:

(A) The windrow composting method, in which the following requirements apply: Aerobic conditions shall be maintained during the compost process. A temperature of 131 degrees F (55 degrees Celsius) or greater shall be maintained in the windrow for at least 15 days. During the high temperature period, the windrow shall be turned at least five times.

(B) The static aerated pile composting method, in which the following requirements apply: Aerobic conditions shall be maintained during the compost process. The temperature of the compost pile shall be maintained at 131 degrees F (55 degrees Celsius) or greater for at least three days.

(C) The within-vessel composting method, in which the temperature in the compost piles shall be maintained at a minimal temperature of 131 degrees F (55 degrees Celsius) for at least three days.

(13) Nitrogen bearing wastes shall be incorporated as necessary to minimize odor and the migration of nutrients.

(14) Miscellaneous Requirements:

(A) The finished compost shall meet the classification and distribution requirements outlined in Rule .1407 of this Section.

(B) The quality of the final product shall determine the allowable uses as outlined in Rule .1407 of this Section.

(C) The final product shall be approved by the Solid Waste Section as outlined in Rule .1407 Paragraph (e) of this Section.

(i) Non-compostable solid waste and unacceptable compost shall be disposed in a solid waste management facility permitted to receive the particular type of waste under 15A NCAC 13B.

(ii) The amount of compost stored at the facility shall not exceed the designed storage capacity.

History Note: *Authority G.S. 130A-294; 130A-309.03; 130A-309.11; 130A-309.29*
Eff. December 1, 1991; RRC objection Eff. April 18, 1996 due to lack of statutory authority;
Amended Eff. June 1, 1996.

15. Certification:

To the best of my knowledge and belief, I certify the information provided in this notification is true, accurate, and complete. Furthermore, the facility will comply with the operational and setback requirements of Small Type 1 Compost (yard waste) facilities as outlined in .1406 and .1404(a)(1)-(10) of the Solid Waste Compost Rules.

Name of Authorized Agent Andrew Snead Signature

Date 5/23/13

(SEAL) DIANE M. PETERSON NOTARY PUBLIC WAKE COUNTY, N.C.

NOTARY PUBLIC Diane M. Peterson

Date 5/23/13

My commission expires: October 29, 2014

Disposition: This form will be transferred to the State Records Center when reference value ends. Records will be held for agency in the State Records Center five (5) additional years and then transferred to the custody of the Archives.

DENR 3764 (2/91)
Solid Waste Section (Review 9/96)

S:/Solid_Waste/CLA/Compost/Yard Waste/YW Notification Form 2013

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0 205 410 820 Feet

1 inch = 400 feet

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YARD WASTE FACILITY NOTIFICATION

Purpose: Notification of yard waste facility sites is required by 15A NCAC 13B .1402(g)(3). A permit is required for facilities storing and processing more than 6,000 cubic yards of material quarterly.

INSTRUCTIONS:

1) Review the attached form.
2) Sign below indicating you have reviewed the form and it is complete and accurate.

Nessa Stone: _____

Sarah Ketchem: _____

Andy Sneed: Please sign page 5 of the attached form and have notarized.

3) Return the attached form signed and notarized to Laura Browning CB# 7516.

Return to WRR by: 5/29/13