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LY Frost	March 31, 2008	4273

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March 21, 2008
Solid Waste Section
Asheville Regional Office

Waste Industry Experts

Joyce Engineering, Inc
2211 W. Meadowview Road
Suite 101
Greensboro, NC 27407

tel: 336/323-0092
fax: 336/323-0093

www.JoyceEngineering.com

March 20, 2008

Mr. Larry Frost
North Carolina Department of
Environment and Natural Resources
Division of Waste Management, Solid Waste Section
2090 US Highway 70
Swannanoa, NC 28778

RE: Wilkes County, Roaring River Landfill, Solid Waste Permit # 97-04
Demonstration for Alternative Cover Materials
JEI Project 356.07 Tasks 36

Dear Larry,

On behalf of Wilkes County, Joyce Engineering Inc. (JEI) is requesting consideration for the use of alternate intermediate cover in accordance with Section .1626 (2)(b) of the Solid Waste Regulations. The County wishes to apply a soil amendment to the portions of the landfill that have received the prescribed one foot of intermediate cover, but have failed to establish sufficient vegetation to limit soil erosion. Due to the limited rate of delivery for the woody material, it is not proposed for use at this time as a daily cover material.

The proposed material will consist of commercially available, partially to fully decomposed wood byproducts including sawdust, wood chips, shredded bark or other decomposing woody material. The material is readily available as a byproduct of sawmill operations. In general, the material has been stockpiled for an extended period and has degraded to the point that it is no longer marketable as boiler fuel or livestock bedding.

The landfill currently has approximately 15 acres of borrow area that are in need of soil amendment (See attached NC DENR Land Quality Inspection Results Form) as well as 5 to 10 acres of intermediate landfill cover. If the material is applied approximately 3 inches thick and graded into the existing slopes and denuded areas, the County may use up to 10,000 CY of material onsite over the next 12 months.

When applied as a soil amendment, JEI believes that the wood-soil mix will not increase the risk of fire, vector proliferation, odors, blowing litter or scavenging at the site and will encourage vegetation growth in the mineral poor soils.

The material will be delivered to the site at a rate not to exceed 1,000 CY per month to limit the amount of stockpiled material. The material may be delivered and stockpiled in the existing borrow area or applied directly to the areas needing amendment. Material delivered to

the site will be utilized within 3 months of delivery, or in the case of the direct application to the amended area, not more than 1 week before mixing with existing soils with a bulldozer or like equipment in preparation for seeding the project area.

In cases where new intermediate cover is being applied, the woody material will be mixed at a maximum ratio of one part soil to one part amendment (1:1 ratio). This will ensure the proper mixing of materials to support vegetation as well as improve the resistance of the soil to erosion damage.

Wilkes County will evaluate the effectiveness of this method of soil amendment for 180 days. If the material is not effective in promoting vegetative growth, the practice will be stopped and any remaining material on site will be spread in thin lifts in the borrow area not to exceed six inches in depth. If the County wishes to continue with this practice, a formal amendment to the facility's Operations Plan will be submitted to the Solid Waste Section for review and approval.

Please do not hesitate to contact us for clarification on any issues concerning this matter; we will be glad to assist you in any way possible in order to expedite your review. Thank you for your consideration in this matter, and please call me at 336-323-0092 if you have any questions.

Sincerely,
JOYCE ENGINEERING, INC.



Evan Andrews, P.E.
Senior Consultant

Enclosures
C: Tommy Livingston, Wilkes County

SEDIMENTATION INSPECTION REPORT

North Carolina Department of Environment and Natural Resources
Land Quality Section: 585 Waughtown Street, Winston-Salem, NC 27107 (336) 771-5000

County: Wilkes Project: Wilkes County Landfill River basin: Yadkin
Person financially responsible: Wilkes County Attn: Gary Page Project # _____
Address: 110 North ~~State~~ St, Wilkesboro NC 28697 Case # _____

1. Project location: Hwy 188
Pictures: No: Yes: Prints: Slides: Video: Digital:

2. Weather and soil conditions: 50's clear sail workable Initial inspection: Yes: No:

3. Is site currently under notice of violation? Yes: No:

4. Is the site in compliance with S.P.C.A. and rules? Yes: No: If no, check violations below:

5. Violations:
- a. No approved plan, G.S. 113A-57 (4) and 15A N.C.A.C 4B.0107(c)
 - b. Failure to follow approved plan, G.S. 113A-57(5)
 - c. Failure to submit revised plan, G.S. 113A-54.1(b) and 15A N.C.A.C. 4B.0118(a)
 - d. Failure to provide adequate groundcover, G.S. 113A-57(3) and 15A N.C.A.C. 4B.0107(b) or 15A N.C.A.C. 4B.0124(e)
 - e. Insufficient measures to retain sediment on site, G.S. 113A-57(3)
 - f. Failure to take all reasonable measures, 15A N.C.A.C. 4B.0105
 - g. Inadequate buffer zone, G.S. 113A-57(1)
 - h. Graded slopes and fills too steep, G.S. 113A-57(2) or 15A N.C.A.C. 4B.0124(d)
 - i. Unprotected exposed slopes, G.S. 113A-57(2)
 - j. Failure to maintain erosion control measures, 15A N.C.A.C. 4B.0113
 - k. Other (describe) _____

6. Potential NPDES Permit Violation? Yes: No: Describe: Failure to follow approved plan

7. Has sedimentation damage occurred since last inspection? Yes: If yes, where? (check all that apply) No:

Lake/natural watercourse on the tract: Lake/natural watercourse off the tract: Other property:

Description: sediment into major drainage northwest of Phase I cell

Degree of damage: slight: moderate: severe:

8. Contact made with (name): Tom Livingston - Wilkes Co Solid Waste Title: Pub. Greene - Wilkes Co Solid Waste
Inspection report given: or sent: to person financially responsible. Date given/sent: 2-7-08 CW

9. Corrective actions needed: (1) Reinstall weir section of ST-2 and restore trap capacity. (2) Provide inlet protection for culvert draining to ST-2 (3) Regrade diversion berm to insure runoff from five storage Area drains to ST-2 also repair failed silt fence below the failed diversion area. (4) Remove accumulated sediment from SB-2. (5) Install inlet protection measures for all culverts. (6) Repair and stabilize all erosion below culvert outlets for area west of major drainage way. (7) Provide adequate vegetative groundcover for all slopes, ditches, and other bare areas that have been idle for 15 working days. (8) Provide fresh washed stone for all sediment traps west of major drainage way, and provide additional storage volume. (9) Establish vegetative stream buffer and repair all gullies for major drainage way (Northwest of Phase I cell) (10) Submit Revised Plan

10. Comments: That addresses all areas outside of Phase I and Phase II plan that was approved on 6-6-97. Otherwise provide documentation that this area is actively permitted for erosion and sediment control
COMMENTS: Above corrective actions should be taken immediately to avoid issuance of a Notice of Violation and potential civil penalties

Report by: Timothy R. Lathrop Others present: Cliff Whittield
Date of inspection: 2-7-08 Time arriving on site: 10:15 am Time leaving site: 12:30 pm

cc: _____