

Permit No.	Scan Date	DIN
8105-MSWLF-	May 8, 2013	18916



Odom
Engineering
PLLC

152 East Main Street • Forest City, NC 28043

Phone (828) 247-4495 • Fax (828) 247-4498

April 29, 2013

Larry Frost
Environmental Engineer
NC DENR
2090 US Highway 70
Swannanoa, NC 28778

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ASHESOLID WASTE SECTION
ASHEVILLE REGIONAL OFFICE

RE: Response to Comment Letter on Rutherford County MSW Landfill Permit Renewal dated March 27, 2013-Permit No. 8105-MSWLF, DIN 18754

Dear Larry,

Enclosed is a revised Operations Plan to address the comments in your letter to James Kilgo of Rutherford County dated March 27, 2013 after the initial review. Specifically, the comments have been addressed as follows:

Financial Assurance

1. Updated closure and post-closure care cost estimates for the Facility are enclosed to address the C&D Landfill 30 year post closure care and the remaining post closure care for the closed MSW landfill.
2. I have provided Ms. Jackie Drummond with the required updates to the Facility's current corrective action plan cost estimates (also enclosed).
3. I have provided Ms. Elizabeth Werner with the required updates to the Facility's Potential Assessment and Corrective Action cost estimates (also enclosed).

Monitoring Plan

4. I have provided Ms. Elizabeth Werner with updates to the Facility's Landfill Gas and Water Quality Monitoring Plans.

Operations Plan (all changes highlighted in yellow)

5. Section 5.1.3-I have revised the hours of operation to be consistent with the County's website.
6. Section 5.5-I have expanded on the personnel training and procedures for waste screening.
7. Section 5.5.1-I have expanded on the methods, equipment and personnel training required to perform visual inspections of the waste at the scale house.
8. Section 5.5.3.2-I have defined the working superintendent and what are the general responsibilities
9. Section 5.5.3.3-I have removed the reference to the NC DMV transport manifest since one is not utilized.
10. Section 5.6.1-I have revised the language regarding CDLF cover as directed.

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11. Section 5.6.2-I have revised the language regarding interim soil cover to the language referred to in 15A NCAC 13B.0542(f)(2) and have defined extreme settlement.
12. Section 5.12-U gave revised the language regarding woody mulch as directed and specified the cover for exposed soils.

Hopefully this addresses all of the comments to your satisfaction. Also note that we revised the Table of Contents to be consistent with the Appendix labels. Please contact me if you need any further clarifications or modifications.

Thanks again for all of your assistance.

Sincerely,

David Odom, P.E.

cc: James Kilgo, Rutherford County Solid Waste Director

ESTIMATED FINAL CLOSURE COSTS FOR PHASE 1A C&D LANDFILL

ITEM	QTY	UNIT	UNIT PRICE	TOTAL
VSL (topsoil)	17,500	CY	\$4.00	\$70,000.00
CSB (barrier)	17,500	CY	\$10.00	\$175,000.00
Establish Vegetation	7.2	AC	\$1,800.00	\$12,960.00
Storm Water Piping	650	LF	\$35.00	\$22,750.00
Erosion Control Stone	40	TON	\$40.00	\$1,600.00
Cap Gas Vents	21	EA	\$100.00	\$2,100.00
SUBTOTAL				\$284,410.00
Testing and Surveying			7.5%	\$21,330.75
Construction Administration			7.5%	\$21,330.75
Contingency			10.0%	\$28,441.00
TOTAL CLOSURE COST ESTIMATE				\$355,512.50

Notes

1. Intended to represent likely third-party construction costs (not the Owner/Operator) based on knowledge of local construction costs.
2. Includes soil work for regulatory requirements of the 2006 C&D Rules, i.e. a minimum of 18 inches of compacted soil barrier and 18 inches of topsoil.

ESTIMATED POST-CLOSURE COSTS FOR PHASE 1A C&D LANDFILL

ITEM	QTY	UNIT	UNIT PRICE	TOTAL
Seeding/Mulching/Erosion Repair	0.35	AC	\$1,600.00	\$560.00
Mow final cap (twice annually)	15	AC	\$375.00	\$5,625.00
Ground Water (semi annually)	12	EA	\$400.00	\$4,800.00
Surface Water (semi annually)	8	EA	\$350.00	\$2,800.00
Water Quality Analysis/Reporting	1	EA	\$2,500.00	\$2,500.00
Gas Monitoring (semi annually)	10	EA	\$500.00	\$5,000.00
Engineering Inspection (annually)	1	EA	\$2,500.00	\$2,500.00
Maintain Stormwater Conveyances	1	EA	\$2,000.00	\$2,000.00
Maintain Roads/Gates/Buildings	1	EA	\$1,000.00	\$1,000.00
TOTAL ANNUAL COST				\$26,785.00
30 YEAR COST				\$803,550.00

ESTIMATED POST-CLOSURE COSTS FOR CLOSED MSW LANDFILL

ITEM	QTY	UNIT	UNIT PRICE	TOTAL
Seeding/Mulching/Erosion Repair	0.50	AC	\$1,600.00	\$800.00
Mow final cap (twice annually)	20	AC	\$25.00	\$500.00
Ground Water (semi annually)	12	EA	\$400.00	\$4,800.00
Surface Water (semi annually)	8	EA	\$350.00	\$2,800.00
Water Quality Analysis/Reporting	2	EA	\$2,500.00	\$5,000.00
Gas Monitoring (semi annually)	10	EA	\$500.00	\$5,000.00
Engineering Inspection (annually)	1	EA	\$2,500.00	\$2,500.00
Maintain Stormwater Conveyances	1	EA	\$2,500.00	\$2,500.00
Maintain Roads/Gates/Buildings	1	EA	\$1,000.00	\$1,000.00
TOTAL ANNUAL COST				\$24,900.00
16 YEARS REMAINING TOTAL COSTS				\$398,400.00

TOTAL CLOSURE AND POST CLOSURE COSTS	\$1,557,462.50
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SOLID WASTE SECTION
ASHEVILLE REGIONAL OFFICE

Financial Assurance Cost Estimate Summary for Potential Assessment and Corrective Action for Construction and Demolition Landfills							
NC Rule	Task	Quantity	Unit Cost	Annual Events	Initial Cost Estimate	Occurrences During PCC* (30 years)	Total Cost Estimate
15A NCAC 13B .0545 (a)	Installation of at least one well at the compliance boundary	1	\$20,000	1	\$20,000	1	\$20,000
15A NCAC 13B .0545 (a & b)	Submit an assessment monitoring work plan for Division review	1	\$100,000	1	\$100,000	1	\$100,000
15A NCAC 13B .0545 (a & b)	Appendix II background sampling of GW sampling network (4 events per sampling location)	4	\$5,000	5	\$100,000	1	\$100,000
15A NCAC 13B .0545 (a & b)	Appendix II sampling of original well network and compliance boundary wells annually (first semi-annual monitoring event)	1	\$5,000	2	\$10,000	1	\$10,000
15A NCAC 13B .0545 (a & b)	Appendix I & II detects sampling of original well network & compliance boundary wells annually (second semi-annual monitoring event)	1	\$5,000	2	\$10,000	1	\$10,000
15A NCAC 13B .0545 (a & b)	Installation of additional monitoring wells to characterize the nature & extent (N&E) of the contaminate plume	1	\$20,000	2	\$40,000	10	\$400,000
15A NCAC 13B .0545 (b)	Appendix II background sampling of GW sampling network (4 events per sampling location)	4	\$5,000	5	\$100,000	1	\$100,000
15A NCAC 13B .0545 (b)	Appendix II sampling N&E well network annually (first semi-annual monitoring event)	1	\$5,000	2	\$10,000	1	\$10,000
15A NCAC 13B .0545 (b)	Appendix I & II detects sampling of original well network N&E well network annually (second semi-annual monitoring event)	1	\$5,000	2	\$10,000	1	\$10,000
15A NCAC 13B .0545 (c & d)	Assessment of Corrective Measures (Report, Public Notice & Public Meeting)	1	\$50,000	1	\$50,000	1	\$50,000
15A NCAC 13B .0545 (e)	Selection of Remedy	1	\$20,000	1	\$20,000	1	\$20,000
15A NCAC 13B .0545 (e & h)	Corrective Action Plan submittal, approval, & implementation	1	\$20,000	1	\$20,000	1	\$20,000
15A NCAC 13B .0545 (e & h)	Installation of additional monitoring wells to monitor effectiveness of selected remedy	1	\$20,000	5	\$100,000	3	\$300,000
15A NCAC 13B .0545 (e & h)	Maintenance & repair of additional monitoring wells	1	\$10,000	1	\$10,000	15	\$150,000
15A NCAC 13B .0545 (e & h)	Sampling & analysis of additional monitoring wells	1	\$5,000	3	\$15,000	30	\$450,000
15A NCAC 13B .0545 (l, m & n)	Corrective Action Remedy is complete	1	\$250,000	1	\$250,000	1	\$250,000
TOTAL COST							\$2,000,000

