



**FACILITY COMPLIANCE INSPECTION REPORT**  
**Division of Waste Management**  
**Solid Waste Section**

<b>UNIT TYPE:</b>											
Lined MSWLF	<input checked="" type="checkbox"/>	LCID		YW		Transfer		Compost	<input checked="" type="checkbox"/>	SLAS	<b>COUNTY: LINCOLN</b> <b>PERMIT NO.: 55-03</b> <b>FILE TYPE: COMPLIANCE</b>
Closed MSWLF	<input checked="" type="checkbox"/>	HHW		White goods	<input checked="" type="checkbox"/>	Incineration		T&P	<input checked="" type="checkbox"/>	FIRM	
CDFL	<input checked="" type="checkbox"/>	Tire T&P / Collection	<input checked="" type="checkbox"/>	Tire Monofill		Industrial Landfill		DEMO		SDTF	

**Date of Site Inspection: August 12, 2014**

**Date of Last Inspection: June 25, 2013**

**FACILITY NAME AND ADDRESS:**

Lincoln County Landfill MSW & C&D  
 5291 Crouse Rd. (SR-1169)  
 Crouse, NC 28033

**GPS COORDINATES:**

N: 35.42288° E: - 81.35695°

**FACILITY CONTACT NAME AND PHONE NUMBER:**

Mark Bivins – Solid Waste Manager  
 Phone (704) 732-9030  
 Fax: (704) 732-9048  
 mbivins@lincolncounty.org

**FACILITY CONTACT ADDRESS:**

W. Tracy Jackson  
 Lincoln County Manager  
 115 W. Main St.  
 Lincolnton, NC 28092  
 (704) 736-8471

**PARTICIPANTS:**

Bill Wagner, Environmental Senior Specialist – Solid Waste Section.  
 James Horn, Lincoln Co. Solid Waste – Landfill Operations Manager  
 Mark Bivins, Lincoln Co. – Solid Waste Manager

**STATUS OF PERMIT:**

Permit 55-03 (DIN 15110) – Issued on March 12, 2013  
 Expires September 11, 2016

**PURPOSE OF SITE VISIT:**

Comprehensive Audit

**STATUS OF PAST NOTED VIOLATIONS:**

N/A

**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 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.

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**HISTORY and BACKGROUND:**

Document Type	Date	DIN
Permit to Operate; Original Issuance (MSW Unit)	9/23/86	N/A
Permit to Operate; (MSW Vertical Expansion - Area E)	5/22/92	N/A
Permit to Construct and Operate; (Demolition Disposal Area)	8/28/92	N/A
Permit to Operate; (MSW Phase I, Cell 1)	8/8/93	N/A
Closure Letter; (MSW Area "E")	12/21/95	N/A
Permit to Operate; Renewal (MSW Phase I)	4/5/99	N/A
Permit to Construct; (C&D Phase II)	4/5/99	N/A
Permit to Construct; (C&D Phase II)	3/31/03	N/A
Permit to Operate – Modification (MSW Phase I, II, and III – C&D Phase IIA)	8/18/03	N/A
Permit to Operate; Amendment (MSW Phase I, II and III - C&D Phase IIA)	9/11/06	409
Permit to Operate; Modification (MSW Phases I, II and III - C&D Phase IIA)	9/15/09	8351
Permit to Operate; Modification(MSW Phases I, II and III - C&D Phase IIA, Closure Requirements for Closed MSW Unit & Miscellaneous Treatment &Processing Units)	3/12/12	15110

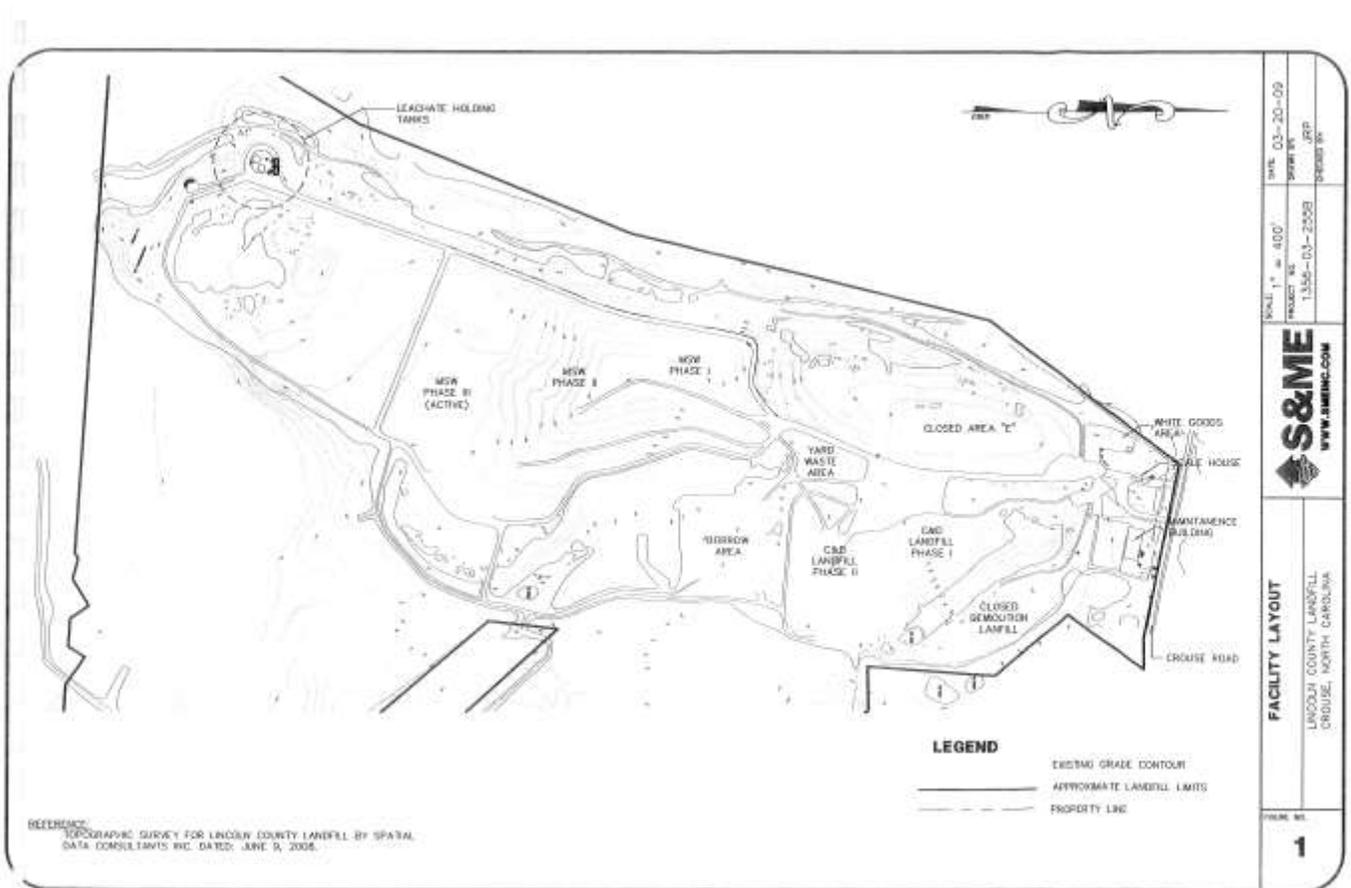


Figure 1: Site Map Lincoln Co. MSW and C&D Landfills 56-03

**ADDITIONAL COMMENTS**

1. Landfill hours of operation: Monday – Saturday 8:30 to 4:30
2. Copies of the landfill permit to operate and the associated operations plans are maintained in the landfill office.

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3. Staff Certifications (SWANA):

Name	Certification	Expiration Date
David Bivins	MOLO	09/24/15
James Horn	MOLO	06/07/16
William Link	Landfill Operations Specialist	03/16/16
Mike Smith	Landfill Operations Specialist	10/14/14
Jimmy Rudisill	Landfill Operations Specialist	04/15/14 – Will re-certify in September 2014
Joshua Scott	Landfill Operations Specialist	10/14/14
Matthew Jewel	Landfill Operations Specialist	10/14/14
Steve Brown	Landfill Operations Specialist	09/12/16
David Hubbard	Landfill Operations Specialist	04/21/16
Doug Morrison	Landfill Operations Specialist	02/23/16
Jeff Dellinger	Landfill Operations Specialist	04/15/17
Walter Laughlin	Landfill Operations Specialist	03/19/16
Gary Arrowood	Landfill Operations Specialist	09/12/16
Travis Avery	Landfill Operations Specialist	04/16/16

Access and Safety

4. Access to the facilities is well controlled and the site is surrounded by fencing.
5. There is proper signage at the landfill entrance.
6. The access roads are well maintained.
7. Traffic control signs are well placed.
8. The facility is served by the municipal water system. There is one fire hydrant at the landfill shop and a second hydrant outside of the main entrance.
9. Howards Creek and Crouse volunteer fire departments provide fire and emergency response as needed.



1. Scale house at the Entrance to the Lincoln County Landfill.



2. Roll-off boxes for segregating wastes and recyclables staged just inside of the entrance to the facility.

Closed Municipal Solid Waste Unit: Area “E”

10. A review of the Solid Waste Section’s records failed to find any specific requirements for the closure of this landfill unit. Lincoln County does not have any records concerning specific requirements for the closure of this landfill unit. It is believed that this unit closed prior to 12/21/95.
11. The vegetative cover on the cap is well established and well maintained. (Photo #3)
12. Edge-of-waste markers are in place at this unit. (Photo #4)
13. There was no evidence of any excessive on-site erosion of the cap.

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14. While the cap is showing some signs of differential settling that could allow water to pond on the landfill, no ponded water was observed.



3. Looking (S) down the eastern side of the closed MSW landfill.



4. Edge-of-Waste marker (typical) for the closed MSW landfill

Construction & Demolition (C&D) Landfill – Phase II

- 15. Tipping fees for the C&D landfill are currently \$30 per ton.
- 16. The C&D landfill is currently taking in approximately 500 tons of waste per month.
- 17. The landfill was actively receiving waste during the audit.
- 18. No prohibited wastes were observed during the inspection.
- 19. Approximately 1% of all incoming loads are screened.
- 20. Waste screening is done daily.
- 21. The active working face was well managed, and not too large. (Photo #5)
- 22. There was very little windblown waste.
- 23. An old “roll-off” box staged near the working face of the C&D landfill for the collection of scrap metal and prohibited wastes. (Photo #6)
- 24. The edge of waste was clearly identified with permanent markers.



5. The working face of the C&D landfill.



6. “Roll-off” box staged near the working face of the C&D landfill for the collection of scrap metal and prohibited wastes.

Municipal Solid Waste (MSW) Landfill – Phase III

- 25. Tipping fees for the MSW landfill are currently \$38 per ton.
- 26. The MSW landfill is currently taking in approximately 3,200 to 3,400-tons of waste per month.
- 27. The landfill was actively receiving waste during the inspection.
- 28. No prohibited wastes were observed during the inspection.

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29. Approximately 1% of all incoming loads are screened.
30. Waste screening is done daily.
31. The working face was small and well managed. (Photo #8)
32. The southern slopes of the MSW landfill have several areas where the required vegetative cover is not adequate. (Photos #7 & #8) **Please take all necessary measures to ensure that all areas of sparse vegetative cover are addressed to prevent excessive on-site erosion. It is recommended that Lincoln County solid waste contact the local agricultural extension office for assistance with ensuring that all of the necessary nutrient requirements for the establishment and maintenance of the necessary vegetative cover are met.**



7. Looking at the (SW) corner of the MSW landfill. (Note the area without the required vegetative cover.)



8. Looking at the (S) slopes of the MSW landfill. (Note the area without the required vegetative cover.)



9. Working face of the MSW landfill.



10. "Tub" grinder owned by Lincoln County.

33. There was very little windblown waste.
34. The edge of waste was clearly identified with permanent markers.
35. **Please take all necessary measures to ensure that the application of daily cover is in accordance with the requirements specified in 15A NCAC 13B 31626(2)(a) "...all MSWLF units must cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging."**

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Treatment and Processing (T&P) Area – Wooden Pallet Grinding

36. Wooden pallets are ground into boiler fuel.
37. Lincoln County owns the grinder for processing the wooden pallets. (Photo #10)
38. Currently there is very little market for this boiler fuel.

Small Type I Composting – Yard Waste

39. A Request for Acknowledgement Letter (RAL) – Small Type I Composting Unit has been approved for the grinding of yard waste into mulch.
40. Lincoln County owns the grinder for processing the yard waste.
41. The yard waste mulch was windrowed into windrows at the time of inspection. (Photo #11)
42. After composting (131°F for at least three days) the mulch is either distributed for use at Lincoln County facilities and properties or given away to Lincoln County residents.
43. Compost is given to Lincoln County residents at no cost.



11. Windrows of compost.



12. Electronics staged on concrete pad.

Electronics Recycling

44. All electronics are collected and taken for recycling by *eCycleSecure* of Charlotte, NC.
45. Electronics are staged and shipped from the white goods concrete pad. (Photo #12)

White Goods & Scrap Metal Area

46. White goods and scrap metals are staged on a concrete pad with push-walls.
47. White goods were well organized and stored in upright positions.
48. Scrap metal is collected by *Southern Metals* in Charlotte for recycling.
49. Landfill staff removes CFCs (refrigeration gases) from the white goods as needed. The CFCs are taken to *Gemaire* facility in Hickory for disposal.
50. This area was clean and well maintained.
51. Used restaurant grease (cooking oil) is collected by *Mahoney Environmental* for recycling.

Scrap Tires

52. Scrap tires are stored in semi-trailers prior to being shipped to the *US Tire* facility in Concord, NC.
53. *US Tire* charges the landfill \$86 per ton for tire recycling and disposal.
54. Scrap tire records are maintained in the Scale House.
55. The scrap tire area was well managed. (Photo #13)
56. Scrap tire records are maintained in the scale house.

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10. Three trailers used for the storage of scrap tires.



11. Typical groundwater monitoring wells – properly identified and locked.

Water Quality Monitoring

57. Water quality monitoring records were reviewed.
58. Water quality samples are collected semi-annually by the landfill's consultant, S&ME. The most recent report of semi-annual water quality monitoring was for the sampling event that occurred April 14<sup>TH</sup> through April 16<sup>TH</sup> 2014.
59. The water quality monitoring plan consists of twenty-eight groundwater monitoring wells, six surface water monitoring points and one leachate sample.
60. A random inspection of groundwater monitoring wells found all wells to be in good repair, secured with padlocks and clearly marked with unique IDs / well tags that were correlated with maps provided by the facility. (Photo #11)

Landfill Gas Monitoring

61. Landfill gas monitoring is done by landfill staff.
62. A *GEM<sup>TM</sup> 2000 Landtec* gas monitor is used.
63. Then landfill gas monitoring plan consists of gas monitoring wells MMW-1,2,3,4,5,6,7, and 8, along with the monitoring the shop, scale house and leachate lift station.
64. Continuous methane gas detectors are installed in the shop building, scale house, and the lift station.
65. Landfill gas monitoring is done monthly and results are submitted to the Section quarterly. The most recent monitoring event occurred on May 19, 2014. Methane monitoring wells MMW-6 and MMW-7 continue to showed elevated methane levels.
66. A random inspection of landfill gas monitoring wells found all wells to be in good repair, secured with padlocks and clearly marked with unique IDs / well tags that were correlated with maps provided by the facility.

Leachate Management

67. The leachate collection system consists of two 250,000-gallon aboveground storage tanks (ASTs). (Photo #12)
68. Leachate is gravity fed to a lift station which pumps the leachate up to the leachate ASTs.
69. Leachate is removed from the ASTs and hauled by landfill staff to the Lincolnton waste water treatment plant.
70. Leachate is routinely removed from the ASTs whenever the level exceeds 50% capacity of any one tank.

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12. Two 250,000-gallon above ground leachate storage tanks located in the (SW) corner of the facility.

Disaster Debris Staging

71. The landfill area located northeast of the leachate tanks and south of Phase III of the MSW landfill can be used as a vegetative disaster debris staging area if needed.

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

Bill Wagner

Environmental Senior Specialist  
**Regional Representative**

Phone: 828-296-4705

Sent on: <u>8/13/14</u>		Email To:		Hand Delivery	X	US Mail		Certified No.
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ec: Jason Watkins, Field Operations Branch Head – Solid Waste Section  
 Sarah Rice, Compliance Officer – Solid Waste Section  
 Mark Bivins, Solid Waste Manager – Lincoln County [mbivins@lincolncounty.org](mailto:mbivins@lincolncounty.org)