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FACILITY COMPLIANCE AUDIT REPORT
Division of Waste Management
Solid Waste Section

NCDENR
NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

UNIT TYPE: (check all that apply to this audit with same Permit number)

Lined MSWLF	X	LCID		YW		Transfer		Compost		SLAS	
Closed MSWLF		HHW	X	White goods	X	Incin		T&P		FIRM	
CDLF	X	Tire T&P / Collection	X	Tire Monofill		Industrial Landfill		DEMO		SDTF	

COUNTY: Davidson
PERMIT NO.: 29-06
FILE TYPE: COMPLIANCE

Date of Audit: 12/10/09. Date of Last Audit: 07/30/09

FACILITY NAME AND ADDRESS:
Davidson County Integrated Solid Waste Facility
220 Davidson County Landfill Road
Lexington, N.C. 27292

GPS COORDINATES: (Decimal Degrees) N: 35.85281 **E:** 80.17620

FACILITY CONTACT NAME AND PHONE NUMBER:
Charles Brushwood, Solid Waste Director
Office- 336-242-2284
Cell- 336-240-0303
e-mail- charlie.brushwood@davidsoncountync.gov

FACILITY CONTACT ADDRESS (IF DIFFERENT):
Davidson County Integrated Solid Waste Management
1242 Old U.S Highway 29
Thomasville, North Carolina 27360

AUDIT PARTICIPANTS:

Angela Jones, Administrative Assistant
Steven Sink, Landfill Supervisor
Michael Langford, Household Hazardous Waste Facility
Lin Rimer, Scale House, County Tire Program
Steve Swaim, Material Recovery Facility, Recycling Coordinator
Sherri Robbins, Administrative Assistant
Chris Hulin, Construction and Demolition Landfill
Jamie Jarrell, Scale House Operator
Ethan Brown, N.C. Solid Waste Section
Hugh Jernigan, N.C. Solid Waste Section

PERMIT HISTORY/STATUS OF PERMIT:

Original Permit to Construct issued September 28. 1994 (Phase I, MSW Unit).
Original Permit to Operate issued January 17, 1995 (MSW Unit, Phase I, Area 3).
Permit Renewal issued August 21, 1995.
Permit to Operate issued March 13, 1996 (MSW Unit, Phase I, Area 1).
Permit to Operate issued May 30, 2000 (MSW Unit, Phase I, Area 2, Cell 1).

Permit to Operate issued June 22, 2001 (HHW Facility).
Permit to Operate issued November 20, 2001 (C&D Landfill Unit, Phase I).
Permit Modification issued May 15, 2002 (Mobile Home Deconstruction for C&D Landfill and Alternative Daily Cover for MSW Landfill).
Permit to Operate issued June 24, 2003 (MSW Unit, Phase I, Area 2, Cell 2).
Permit to Operate issued April 10, 2006 (C&D Landfill Unit, Phase II).
Permit to Construct issued September 28, 2007 (MSW Landfill, Phase II Area 1).
Permit to Operate issued December 8, 2008: (Phase II Area 1), (Partial Closure Phase I, Areas 1&3) (Closure Modification and Regrading Plan, Phase I).
Permit Expiration Date July 27, 2011.

PURPOSE OF AUDIT:
Comprehensive Audit

NOTICE OF VIOLATION(S):
NONE

You are hereby 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 Statute or Regulations. For the violation(s) noted here, you 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.

STATUS OF PAST NOTED VIOLATIONS :

Compliance Order with Administrative Penalty Issued July 15, 2009:

- Failure to cover waste in the Phase II MSW Landfill at the close of business on May 28, 2009.
- A leachate release into the environment occurred during the weekend of June 5, 2009 from on-site storage tanks and secondary containment areas.
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Conditions for Compliance:

- Immediate cover of all exposed waste and the daily covering of waste is to be continuously documented in the form of a daily cover log with verification of a supervisor.
- Repair the leachate collection and containment area to prevent any future leachate releases and to notify the Solid Waste Section (Hugh Jernigan) upon completion of the repairs.
- Submittal to the Solid Waste Section (Hugh Jernigan) of a plan of action to prevent future leachate releases for review and approval.
- Submittal of a plan of action to the Solid Waste Section (Jaclynne Drummond) to assess and possibly remediate any ground water contamination resulting from the leachate release.
- Submittal of a training program to the Solid Waste Section (Jason Watkins), providing regularly scheduled training events for all landfill staff on Operations Plan content, operational rules and statutes.

Status of Compliance Order

- Waste was covered and facility is maintaining a daily cover log signed by a supervisor for MSW Landfill operations.
- Repairs were performed on the leachate system, tank, and containment area. The Solid Waste Section was notified and verification was conducted by inspection by the Solid Waste Section.
- Plan of action to prevent future leachate releases was submitted and approved by the Solid Waste Section.
- Letter from Jaclynne Drummond dated November 19, 2009 approving the plan of action and assessment of potential groundwater contamination.
- A training program agenda for landfill staff was submitted and approved by the Solid Waste Section

An **Administrative Consent Agreement and Settlement** was signed and executed by Davidson County and Division of Waste Management on November 6, 2009,
The Solid Waste Section received payment on November 9, 2009 for penalty and investigative cost as per the executed **Administrative Consent Agreement and Settlement.**

AREAS OF CONCERN AND COMMENTS:

General Information

1. The facility consists of a MSW Landfill (Phase I and Phase II), Construction and Demolition Landfill, Household Hazardous Waste Collection Facility, Tire Collection Site, White Goods Collection and Processing Facility, a metals collection site, a waste drop-off convenience area for cars and small trucks, a swap shop area, household textiles recycling area, electronics recycling, a drop-off convenience area for selected recyclables, and a Material Recovery Facility for collected recyclables.
2. The service area for the facility is Davidson County.
3. Operational records for the facility are maintained at the Davidson County Integrated Solid Waste office located at 1242 Old U.S Highway 29.
4. Reviewed current permit, operational plans, tonnage reports and other operational records for the facility and facility components.
5. The facility is covered under N.C. General Storm Water Permit No. NCG120038 issued in 2007 and expiring in 2012.
6. The facility is covered under approved Erosion and Sedimentation Control plan. The last plan approval was in April 2007 for the Phase 2 MSW Landfill construction. The facility has a pump and haul permit to the City of Lexington Waste Water Treatment Plant for leachate generated by the MSW Landfill operations.
7. Reviewed facility training records including SWANA certifications, waste screening training, and other related solid waste training.
8. Current SWANA certifications for all facility areas of operation include, but not limited to: Steven Sink, Certified Landfill Manager-expires 11/30/10; Angela Jones, Landfill Operations Specialist-expires 03/27/13; Daniel Freeman, Landfill Operations Specialist-expires 02/07/10; Daniel James, Landfill Operations Specialist-expires 02/07/10; Michael Lankford, Landfill Operations Specialist-expires 02/07/10; Jamie Jarrell, Landfill Operations Specialist-expires 05/01/10; Linda Riner, Landfill Operations Specialist-expires 02/07/10; and Brandt Peoples, Landfill Operations Specialist-expires 02/25/11.
9. Note: There is an adequate number of facility staff currently holding training certifications to meet the requirements of G.S 130A-309.25 "Training of Operators at Solid Waste Facilities". For informational purposes only, review of training records indicated the following certifications have recently expired: Charles Brushwood, Certified Landfill Manager-expired 04/15/09; Karry Blaylock, Certified Landfill Manager-expired 04/28/09; Keith Cecil, Landfill Operations Specialist-expired 05/16/09; and Mark Pierce, Landfill Operations Specialist-expired 05/16/09.

10. The facility has submitted financial assurance documentation for the current year.
11. The MSW landfill permit to operate contains a condition to allow for disposal of Waste Water Treatment Plant sludge.
12. Reviewed the Operations Plans for the MSW and C&D landfills.

Phase 1 Landfill Unit

13. General MSW disposal for the Phase I Area was discontinued on December 16, 2008 after initial operations were commenced in the Phase II. There was (~47,000 cubic yards) still available airspace remaining in the Phase I area.
14. The facility returned back into Phase I MSW Area September 22, 2009 to fill remaining air space, achieve permitted contours, and prepare crown for closure.
15. Completed Phase I disposal operations on November 18, 2009 for closure contours, establishing crown, and preparation for methane studies for a landfill gas extraction system.
16. November 18, 2009 should be considered "last receipt of waste" in Phase I for the purpose of MSW landfill closure activities.
17. The MSW Phase I, Area 3 and parts of Area 1 have undergone closure and approval by the Solid Waste Section.
18. The closed Phase I, Area 3 and Area 1 wase found to be stable and have good vegetative cover.
19. Adequate intermediate soil cover has been placed on the most recently utilized disposal areas in Phase I. **Note: Additional soil cover should be placed on the top of the Phase I MSW landfill in the small area identified during the inspection between the interface between Areas 2 and 1. There is a small area which has the potential to create ponding of storm water.**
20. A comprehensive closure plan and submittal for approval of landfill gas extraction system is being prepared.
21. Reviewed the methane monitoring program and quarterly methane monitoring sampling results for Phase I. Last monitoring event for Phase I was September 25, 2009, no methane detected at methane monitoring points and facility structures. Note: The methane monitoring for Phase II should be conducted at the same time as the Phase I area and facility buildings.
22. A temporary test landfill gas extraction system and operating flare have been installed on the closed area for volume and flow testing in preparation for a complete landfill gas system in the entire Phase I area.
23. Reviewed semiannual monitoring program and last semiannual monitoring report for the Phase I sampling event of September 25, 2009 analysis results indicated iron, manganese, and vanadium above 2L standards. No organic constituents noted above 2L.
24. Monitoring wells are accessible and locked.
25. Reviewed leachate program and records.
26. The Phase I leachate collection lagoon was observed to have adequate residual capacity available. The collected leachate is pumped and hauled to the City of Lexington Waste Water Treatment Plant.
27. For the month of November 2009 the Phase I Area hauled 108,000 gallons of leachate to the waste water treatment plant.
28. Reviewed random inspection program and reviewed waste screening reports. There have been 14 random inspections conducted during the period 9/10/09-12/09/09 (combined Phase I and Phase II Areas). Section 2.4.1 of the Operations Plan states a minimum of 1% or one per week of incoming loads are to be inspected. The number random inspections exceed 1% of incoming loads for the period.
29. Edge of waste markers are on site and are awaiting labeling for installation on the Phase I Area.

Phase II MSW Landfill Unit

30. Disposal operations began December 10, 2008 for the Phase II, Cell 1 area.
31. Reviewed the methane monitoring program and quarterly methane monitoring sampling results for Phase II. The previous two methane monitoring events for Phase II, July 7, 2009 and September 25, 2009 detected no methane in facility structures and monitoring points. Methane probes were documented as installed on the Phase II area August 2008. Note: The methane monitoring for Phase II should be conducted on the same date as the Phase I Area and facility structures.
32. Reviewed asbestos disposal program. The last disposal of regulated asbestos occurred April 30, 2009 (51 bags, 1.71 tons). The disposal location for asbestos in the MSW landfill is logged and maintained.
33. Reviewed daily cover logs, leachate system inspection plan, and leachate system inspection logs (Conditions of July 15, 2009 Compliance Order).
34. Reviewed landfill staff training plan and landfill staff training logs; staff training conducted by the Solid Waste Section (23 landfill staff personnel) on October 29, 2009 (Condition of July 15, 2009 Compliance Order)
35. Reviewed semiannual surface water/ground water/leachate monitoring program. The last semiannual monitoring event occurred on September 25, 2009. The Phase II MSW Landfill semiannual monitoring report is being revised due to a problem with inadequate water levels in a monitoring well and not available at this time.
36. The MSW Landfill is currently receiving approximately 300-350 tons per day; the MSW Landfill received 7,846.21 tons for the month of November 2009 (combination of Phase I and Phase II Areas).
37. Phase II leachate is collected and stored in a 330,000 gallon storage tank (550,000 secondary containment area) and is hauled to the City of Lexington Waste Water Treatment Plant. At the time of the facility audit the leachate storage tank was registering 8 feet of leachate.
38. The Phase II area hauled 379,600 gallons of leachate to the waste treatment plant during the month of November 2009.
39. Reviewed random inspection program and reviewed waste screening reports. There have been 14 random inspections conducted during the period 9/10/09-12/09/09 (combined Phase I and Phase II Areas). Section 2.4.1 of the Operations Plan states a minimum of 1% or one per week of incoming loads are to be inspected. The number random inspections exceed 1% of incoming loads for the period.
40. Edge of waste markers are in place on the Phase II area (as contract specification for construction). These markers are to be replaced with more durable markers which are on site and awaiting labeling for installation
41. Observed operations at the Phase II MSW landfill.
42. Currently operating in Cell 1.
43. Adequate daily soil cover observed over previous daily disposal operations, no areas of exposed waste.
44. The working face was compact and well defined, the tipping deck area was well maintained and free of debris for effective ingress and egress of disposal vehicles
45. Adequate compaction of incoming waste from daily operations.
46. Adequate intermediate soil cover over previous waste disposal areas.
47. Seeding has been conducted over intermediate soil cover areas.
48. Windblown materials observed to be effectively controlled and collected. The facility has constructed portable fences to be utilized as needed.
49. Monitoring wells accessible and locked.
50. The MSW Landfill is approved for the use of tarps as an alternative daily cover. Soil cover is being applied for end of the day operations on 12/10/09 due to high winds.
51. No on-site or off-site erosion noted. Sedimentation basins maintained and have adequate capacity.

C&D Landfill

52. Observed operations at the C&D landfill.
53. The C&D landfill facility began receiving waste on December 4, 2001.
54. Deconstruction of mobile homes is approved by 05/15/02 Permit modification at the C&D landfill. No mobile home deconstructions have been conducted in recent months.
55. The working face was well controlled and defined (approximately ¼ acre in size) and waste was well compacted.
56. Weekly soil cover and intermediate cover adequate. Reviewed "Weekly Soil Cover Log" being maintained for verification of weekly soil cover requirements.
57. Seeding has been conducted on the north and east facing side slopes. Seeding of the remainder of the intermediate soil cover is to be conducted during the next week.
58. No on-site or off-site erosion noted.
59. The C&D Landfill receives approximately 20-50 of waste per day. 765.08 tons of waste was disposed in the landfill during the month of November 2009.
60. The C&D Landfill is approved for, and conducts recycling activities on site consisting of metals, clean wood, cardboard and other recyclables which are placed in proper containers at the end of each day.
61. Observed incoming loads, all incoming waste generated from construction and demolition operations during inspection period. No prohibited waste was noted in the C&D landfill.
62. Reviewed random inspection program and reviewed waste screening reports. There have been 12 random inspections conducted at the C&D Landfill during the period 9/10/09-12/09/09 . Section 2.4.1 of the Operations Plan states a minimum of 1% or one per week of incoming loads are to be inspected. The number random inspections exceed 1% of incoming loads for the period.
63. Edge of waste markers are in place. The current markers are to be replaced with more durable markers which are on site and waiting labeling for installation.
64. Reviewed semiannual monitoring program and last semiannual monitoring report for the C&D Landfill sampling event of September 22, 2009 analysis results indicated iron, manganese, and lead the NCAC 2L ground water standards. No organic constituents are noted above 2L standards.
65. Monitoring wells were observed to be secure, accessible, and locked.
66. Windblown materials well controlled and collected.
67. The C&D landfill unit has a leachate sump system located in the northwest corner of the landfill. The system has not been accumulating leachate and has not required pumping in the past year. Reviewed leachate logs for the C&D landfill unit.
68. As per .0531 (c) (2), the Davidson County C&D Landfill has submitted an application to the Solid Waste Section to meet the requirements of .0547 (2) (a) (closure and post closure plan) and (b) (financial responsibility).

Household Hazardous Waste Facility

69. The facility was initially permitted to operate June 22, 2001.
70. Reviewed HHW facility operations and procedures. The HHW facility is open to Davidson County citizens on Wednesdays by appointment, the first Saturday of each month, and by appointment for special considerations.
71. Delivery and processing operations are in covered areas. An emergency drain and sump is located in the delivery area for potential spills.

72. Review of training records indicate Mike Lankford and Elly Barton have course completion certifications including Hazardous Waste Management issued by Environmental Resource Center, August 2005, Advanced Hazardous Waste Compliance for Generators issued by the Division of Waste Management, 2001, and HAZWOPER certifications for yearly HAZWOPER annual updates.
73. Reviewed HHW facility operations plan, contingency plans, spill prevention plans, and brochures given to the public.
74. Reviewed HHW facility operational records including daily receiving logs, weekly staff inspection logs, weekly inventory logs, and shipping manifests.
75. Reviewed HHW acceptance, identification, packing, and storing procedures.
76. Collected HHW at the site is packaged in 55 gallon barrels on site and transported by Shamrock Environmental Services to Resource Recovery and Reduction (3RC). Collected antifreeze is picked up by U.S. Filter.
77. The most recent manifest for delivery to 3RC was October 7, 2009. The shipment included 9 barrels of flammable liquids, 3 barrels of flammable solids, 1 barrel of acid corrosives, 1 barrel of alkaline corrosives, 7 barrels of sludge, 4 barrels of vegetable oils, and 7 barrels of used motor oils.
78. Review of facility logs indicated the facility collected 53,514 pounds of HHW during the reporting period July 1, 2008-June 30, 2009.
79. Excellent documentation and records maintenance.
80. The facility was observed to be clean and well maintained, with minimal inventory on site. The facility receives paints, poisons, flammable solvents, flammable solids, antifreeze, used oils, oxidizers, compressed gas, acids, batteries, and other miscellaneous HHW waste.
81. The facility also recently began accepting fluorescent lights
82. Collected used automotive oils are typically utilized in waste oil burners at the Davidson County Landfill, any excess motor oils are shipped to 3RC.
83. Non-hazardous latex paints are solidified on site for disposal in the MSW landfill. Other non-hazardous residues are also sent to the MSW Landfill.
84. The facility does not accept explosives, infectious waste, or radioactive waste.

Other Facility Components

85. Observed operations at the small vehicle/resident waste disposal convenience and recycling area, tire collection site, household textiles recycling area, electronics recycling, white goods collection and processing facility, metal collection and swap shop area.
86. Observed operations at the material recovery facility. The picking line was in operation during the audit.
87. The material recovery facility processes items collected from the Davidson County recycling program and collected recyclables from the cities of Lexington and Thomasville. Reviewed tonnage reports for the period July 1, 2009- December 10, 2009 the facility collects and processes Plastics, Glass, Electronics, Newspaper (ONP), Mixed paper (MPW), Cardboard (OCC), Office paper (OFP), Aluminum cans, and Steel cans.
88. The Textile Recycling operation collected 14.33 tons of textiles for the period July 1, 2009-December 10, 2009.
89. In conjunction with other Davidson County recycling programs the county collects: used motor oil, antifreeze, lead acid batteries, rechargeable batteries, and vinyl siding.
90. Observed white goods collection and processing facility, and metals collection and processing areas. White goods brought in by county residents are processed at the site and have CFC's, motors, wiring, and other components removed before shipment to recyclers.

91. Conducted a review of the County tire collection program. The facility maintains a log of registered tire haulers and generators delivering tires to the site. Tonnage totals for received tires are listed under commercial for the registered haulers/generators and separately for less than 5 tires brought in by county residents and county clean-ups. Incoming scrap tires are placed directly into trailers by scrap tire haulers, and is monitored by scale house personnel. Reviewed recently processed tire certification forms and found to be accurate and properly signed. The facility received 105.52 tons of tires during the month of November 2009.
92. Excellent documentation regarding registered tire haulers, generators, and tonnage reports. The scrap tire collection area was found to be well managed and operated.

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

Hugh Jernigan Phone: 336-771-5093.
Regional Representative

Distribution: original signed copy to facility -- signed copy to compliance officer – e-mail or copy to super

Delivered on : 12/11/09 **by**	X	e-mail		US Mail		Certified No.

cc: Mark Poindexter, Field Operations Branch Supervisor
Jason Watkins, Central District Supervisor
Donald Herndon, Compliance Officer
Ethan Brown, Solid Waste Section