



FACILITY COMPLIANCE AUDIT REPORT
Division of Waste Management
Solid Waste Section

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

Lined MSWLF	<input checked="" type="checkbox"/>	LCID		YW		Transfer		Compost		SLAS		COUNTY: Davidson PERMIT NO.: 29-06 FILE TYPE: COMPLIANCE
Closed MSWLF	<input checked="" type="checkbox"/>	HHW	<input checked="" type="checkbox"/>	White goods	<input checked="" type="checkbox"/>	Incin		T&P		FIRM		
CDLF	<input checked="" type="checkbox"/>	Tire T&P / Collection	<input checked="" type="checkbox"/>	Tire Monofill		Industrial Landfill		DEMO		SDTF		

Date of Audit: 09/01-02/10.

Date of Last Audit: 12/10/09

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:

Charles Brushwood: Solid Waste Director
 Angela Jones, Administrative Assistant
 Steven Sink, Landfill Supervisor
 Michael Langford, Household Hazardous Waste Facility
 Elly Barton, Household Hazardous Waste Facility
 Lin Rimer, Scale House, County Tire Program
 Steve Swaim, Material Recovery Facility, Recycling Coordinator
 Sherri Robbins, Administrative Assistant
 Daniel Freeman, Construction and Demolition Landfill
 Jamie Jarrell, Scale House Operator
 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).

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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 :

Review and Status of Requirements for Compliance Order Issued July 15, 2009:

- **Condition #1:** 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.
A daily cover log for the MSW Landfill is being maintained with verification by signature of a supervisor. The daily cover log was reviewed during this audit.
- **Condition #2:** 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.
Repairs were performed on the leachate system, tank, and containment area. The Solid Waste Section was notified of the repairs and verified by inspection on July 30, 2009.
- **Condition #3:** Submittal to the Solid Waste Section (Hugh Jernigan) of a plan of action to prevent future leachate releases for review and approval.
A plan of action to prevent future leachate releases was submitted and approved by the Solid Waste Section. The approved Leachate Release Prevention Plan included provisions for training (quarterly discharge briefings, and annual leachate release response drills) and weekly inspections of leachate storage tank and equipment. The required training and annual response drill has been conducted and documented. The weekly leachate inspection log and training documentation was reviewed during this audit.
- **Condition #4:** 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.
The plan of action and analytical results were reviewed and approved by Jaclynne Drummond on November 19, 2009. The approval letter also included a condition that the county was to establish a grass cover in the area of the leachate spill and a soil sample be collected in mid-2009 for phosphorus analysis. The grass cover has been established and soil samples have been taken for analysis.
- **Condition #5:** 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.

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The approved training program included provisions for each operator to receive a copy of the facility Operations Plan and regularly scheduled training with test on the Operations Plan being given in April and October of each year. The facility is to maintain a training log.

A review of the training program and training logs indicated the requirements of the training program have been met. In addition, the facility has been conducting weekly training sessions on specific topics in the Operations Plan, and an evening training session on rules and operational requirements was conducted for landfill staff (23 attendees) by the Solid Waste Section on October 29, 2009.

Note: All conditions of the compliance order have, and are being met upon review during this audit.

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.
7. 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.
8. Reviewed facility training records including SWANA certifications, waste screening training, and other related solid waste training.
9. Current active SWANA certifications for all facility areas of operation include, but not limited to: Charlie Brushwood, Certified Landfill Manager-expires 6/26/12; Steven Sink, Certified Landfill Manager-expires 11/30/10; Angela Jones, Landfill Operations Specialist-expires 03/27/13; and Brandt Peoples, Landfill Operations Specialist-expires 02/25/11. A SWANA Landfill Operations Specialist course for additional facility personnel has been scheduled for September 30- October 1, 2010.
10. The most recent facility financial assurance documentation was approved by the Solid Waste Section April 2010.
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 MSW Landfill Unit

13. The Phase 1 MSW Landfill has reached capacity and ceased disposal operations on November 18, 2009.
14. November 18, 2009 should be considered "last receipt of waste" in Phase I for the purpose of MSW landfill closure activities.
15. The MSW Phase I, Area 3 and parts of Area 1 have previously undergone final closure and approval by the Solid Waste Section.

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16. The closed Phase I, Area 3 and Area 1 was found to be stable and have good vegetative cover. Mowing is to be scheduled for these areas.
17. Construction activities are currently ongoing for regulatory cap and final closure of Phase I, Area 2 and remainder of Area 3.
18. Landfill gas wells and landfill gas collection system components are currently being constructed.
19. A temporary landfill gas flare has been installed.
20. No exposed waste and no onsite erosion from the construction activities were observed.
21. Waste exposed resulting from installation of landfill gas wells and piping is collected and covered daily.
22. Reviewed the methane monitoring program and quarterly methane monitoring sampling results for Phase 1, including methane monitor calibration data. The last methane monitoring event for Phase I was conducted June 25, 2010, no methane detected at methane monitoring points and facility structures.
23. Sedimentation basins have adequate capacity.
24. Reviewed semiannual monitoring program and last semiannual monitoring report for the Phase I sampling event of April 20, 2010 analysis results indicated iron, manganese, and vanadium above 2L standards. No organic constituents noted above 2L.
25. Monitoring wells are accessible and locked.
26. Reviewed leachate program and records.
27. 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.
28. No leachate has been pumped from the leachate lagoon since July 2010.
29. Edge of waste markers are to be re-installed on the Phase I Area as part of closure activities.

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, including methane monitor calibration data. The last methane monitoring event for Phase I was conducted June 25, 2010, no methane detected at methane monitoring points and facility structures. For future methane monitoring the facility is to rent a monitoring device, under contract with supporting calibration documentation for the device.
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). The facility has weekly scheduled training sessions on operations for landfill staff.
35. Reviewed semiannual surface water/ground water/leachate monitoring program. The last semiannual monitoring event occurred on April 19, 2010.
36. The MSW Landfill is currently receiving approximately 300-350 tons per day.
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 5 feet of leachate (approximately 15%-20% of storage capacity).
38. Reviewed weekly leachate tank inspection logs and training logs. A simulated leachate release exercise was conducted during the month of July and periodic training for facility has been conducted (Condition of July 15, 2009 Compliance Order).
39. The Phase II area hauled 317,600 gallons of leachate to the waste treatment plant during the month of July 2010.

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40. Reviewed random inspection program and reviewed waste screening reports. During the month of August 2010 nine (9) random inspections conducted at the Phase II MSW landfill. (An additional four random inspections were conducted at the C&D Landfill unit. 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.
41. 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
42. Observed operations at the Phase II MSW landfill.
43. Currently operating in Cell 4.
44. Adequate daily soil cover observed over previous daily disposal operations, no areas of exposed waste.
45. 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.
46. Adequate compaction of incoming waste from daily operations.
47. Adequate intermediate soil cover over previous waste disposal areas.
48. The facility is to schedule seeding operations within the next month for intermediate soil cover areas.
49. Windblown materials observed to be effectively controlled and collected. The facility has constructed portable wind fences (approximately 20 ft. wide X 12 ft. high) to be utilized as needed. Additional wind fences have been constructed and there are currently 14 portable fences on site.
50. Monitoring wells accessible and locked.
51. The MSW Landfill is approved for the use of tarps as an alternative daily cover. Soil cover was being applied during the audit and photos were taken of the working face and tipping deck.
52. No on-site or off-site erosion noted. Sedimentation basins maintained and have adequate capacity.

C&D Landfill

53. Observed operations at the C&D landfill.
 54. The C&D landfill facility began receiving waste on December 4, 2001.
 55. 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.
 56. The working face was well controlled and defined (approximately 1/8 acre in size) and waste was well compacted.
 57. Weekly soil cover and intermediate cover adequate. Reviewed "Weekly Soil Cover Log" being maintained for verification of weekly soil cover requirements. Soil cover was applied on August 2, 5, 9, 16, 23, and 30, 2010.
 58. Seeding has been contracted for the intermediate soil cover and should be conducted within 30 days.
 59. No on-site or off-site erosion noted.
 60. The C&D Landfill receives approximately 20-50 of waste per day.
 61. 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.
 62. 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.
 63. The tipping and processing areas were observed to be well managed
 64. Reviewed random inspection program and reviewed waste screening reports. For the month of August, 2010 four (4) random inspections conducted at the C&D Landfill during the period (an additional 9 were conducted at the Phase II MSW Landfill). 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.
 65. Edge of waste markers are in place.
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66. Reviewed semiannual monitoring program and last semiannual monitoring report for the C&D Landfill sampling event of April 21, 2010 analysis results indicated iron, manganese, and lead the NCAC 2L ground water

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- standards. No organic constituents are noted above 2L standards.
67. Monitoring wells were observed to be secure, accessible, and locked.
 68. Windblown materials well controlled and collected.
 69. 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.
 70. 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). The documentation is currently under review by the Solid Waste Section Permitting staff.

Household Hazardous Waste Facility

71. The facility was initially permitted to operate June 22, 2001.
72. The HHW facility is open to Davidson County citizens on Wednesdays, the first Saturday of each month, and by appointment.
73. Reviewed HHW facility operations and procedures.
74. The facility receives paints, poisons, flammable liquids, aerosols, corrosive liquids, caustic liquids, oxidizing liquids, caustic alkali, solvents, flammable solids, antifreeze, used oils, oxidizers, compressed gas, acids, batteries, and fluorescent bulbs.
75. Collected HHW at the site is packaged in 55 gallon barrels on site and transported to Resource Recovery and Reduction (3RC) in Winston-Salem.
76. Collected used automotive oils are typically utilized in waste oil burners at the Davidson County Landfill, any excess motor oils are shipped to Resource Recovery and Reduction (3RC).
77. 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.
78. The facility does not accept explosives, infectious waste, or radioactive waste.
79. Reviewed HHW acceptance, identification, packing, and storing procedures.
80. Delivery and processing operations are in covered areas. An emergency drain and sump is located in the delivery area for potential spills.
81. 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 (last update July 7, 2010).
82. Reviewed HHW facility operations plan, contingency plans, spill prevention plans, and brochures given to the public.
83. Reviewed HHW facility operational records including daily receiving logs, weekly staff inspection logs, weekly inventory logs, and shipping manifests.
84. The facility received 6,557 pounds of HHW for the month of July 2010.
85. The most recent manifest for shipment of collected HHW to 3RC was May 5, 2010
86. Review of facility records and submitted Annual Facility Report indicated the facility collected 60,290 pounds of HHW during the reporting period July 1, 2009-June 30, 2010.
87. Excellent documentation and records maintenance.
88. The facility was observed to be clean and well maintained, with minimal inventory on site.

Other Facility Components

89. 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, a used oil filter collection/crushing operation, and swap shop area.
90. Observed operations at the material recovery facility. The picking line was in operation during the audit.
91. The material recovery facility processes items collected from the Davidson County recycling program and

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collected recyclables from the cities of Lexington and Thomasville. Reviewed tonnage reports for the period July 1, 2010- September 2, 2010 the facility collects and processes Plastics, Glass, Electronics, Newspaper (ONP), Mixed paper (MPW), Cardboard (OCC), Office paper (OFP), Aluminum cans, and Steel cans.

92. The county and facility have an active electronics recycling program. The county is currently revising the Davidson County 10-Year Solid Waste Management Plan to reflect current and future electronics recycling operations.
93. In conjunction with other Davidson County recycling programs the county collects: used motor oil, antifreeze, lead acid batteries, rechargeable batteries, and vinyl siding.
94. 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. The white goods processing facility has several CFC removal units to segregate the various types of CFC's.
95. Conducted a review of the County tire collection program. Collected scrap tires are hauled to U.S. Tire in Concord. Incoming scrap tires are placed directly into trailers by scrap tire haulers, and are monitored by scale house personnel. The tire collection trailer area was observed to be well maintained.
96. The facility maintains a log of registered tire haulers and generators delivering tires to the collection 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. Reviewed recently processed tire certification forms and found to be accurate and properly signed. The facility received 105.73 tons of scrap tires during the month of July 2010. Larger scrape tire generators in the county direct haul collected tires. A total of 61.71 tons of tires from scrap tire generators were direct-hauled to U.S Tire in Concord.
97. 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.



Phone: 336-771-5093

Hugh Jernigan
 Environmental Senior Specialist
 Regional Representative

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

Delivered on : <u>09/14/10</u> by	X	e-mail		US Mail		Certified No.
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cc: Mark Poindexter, Field Operations Branch Supervisor
 Jason Watkins, Central District Supervisor
 Donald Herndon, Compliance Officer