

June 23, 2016

Ms. Jackie Drummond
NCDEQ - Division of Waste Management
Winston-Salem Regional Office
585 Waughtown St.
Winston-Salem, North Carolina 27107

**RE: Leachate Release Response Plan
Davidson County Landfill (SWS Permit No. 29-06)
Lexington, North Carolina**

Dear Ms. Drummond:

This Leachate Seep Response Plan has been prepared in response to the NOV issued June 20, 2016 related to violations observed during inspections performed June 6 and 10, 2016. Davidson County was in violation of 15 A NCAC 13B .05042(l)(4) by failing to capture leachate prior to discharge. "Ponding liquid was observed at the toe of the working face, along with a trail of liquid flow along the access roadway following the edge of waste downhill to an inert debris stockpile area, then out into the open area between the closed Phase 1 MSWLF and the active CDLF." The NOV requires this sampling plan to be submitted to Jaclynne Drummond within 10 days from receiving the NOV. To evaluate the extent of environmental impact resulting from the leachate release Smith Gardner, Inc. (S+G) will perform the following scope of work.

Sampling Plan

Soil Sample Collection and Analysis

S+G personnel will mobilize to the site to collect soil samples from the flow path of the leachate release; shown on the attached **Figure 1**. To evaluate soil quality within the flow path, S+G proposes to collect a total of three discreet grab samples; one sample will be collected near the source of the release, a second sample will be collected in the flow path and the third sample will be collected where the leachate flow ended. Due to the naturally occurring inorganic metals in the soils of North Carolina, S+G will also collect a background sample upgradient and away from the leachate flow path. Background sample results will be compared with samples collected in the flow path, to evaluate the concentrations of naturally occurring constituents. The proposed sampling locations are shown on **Figure 1**.

Each sample will be collected from a depth between one (1) and two (2) feet below grade. Samples will be analyzed for the Appendix I list of constituents (40 CFR 258 Appendix I) by a North Carolina certified laboratory.

Reporting

Within 15 business days after receiving the laboratory analytical data, S+G will submit a report to NCDEQ summarizing sample collection techniques and laboratory analytical data results. Analytical data will be compared to site background conditions (Upgradient soil analysis) and relevant standards (NC Soil Preliminary Soil Remediation Goals). This report will also include a map of sampling locations, conclusions and recommendations.

S+G appreciates your timely review of this leachate release response plan and we are prepared to implement it following approval. If you have any questions or require additional information, please contact us at 919-828-0577 or by email below.

Sincerely,
SMITH GARDNER, INC.



Madeline M. German, P.G.
Project Geologist
madeline@smithgardnerinc.com



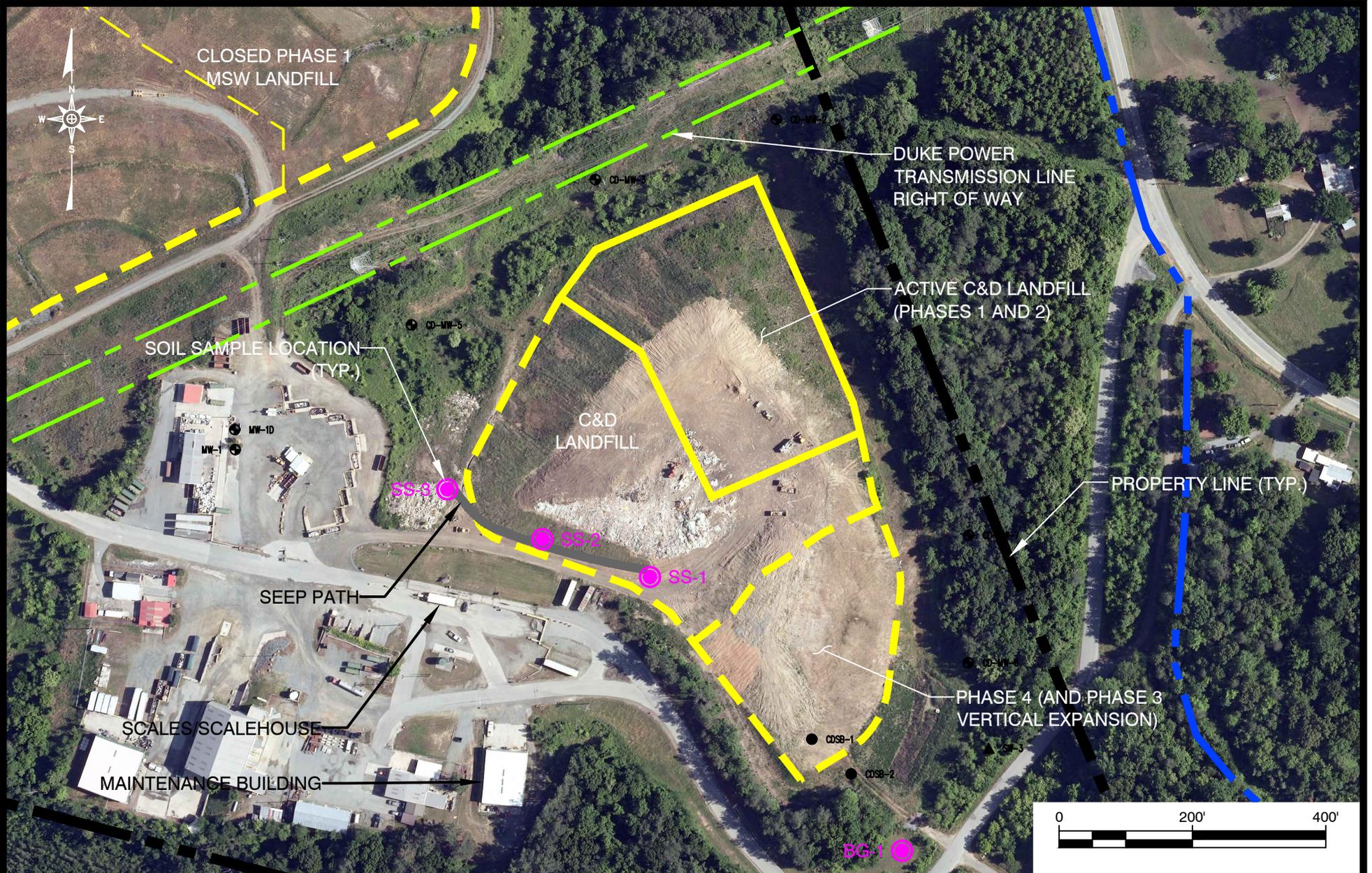
Joan A. Smyth, P.G.
Senior Hydrogeologist
joan@smithgardnerinc.com



Attachments - Figure 1
Inspection Report (6/2&10/2016
NOV (6/20/2016)

cc: Rex Buck – Davidson County
Steven Sink – Davidson County
Susan Heim - NCDEQ

G:\CAD\Davidson\Davdco 15-9\sheets\DAVDCO-A0815.dwg - 6/23/2016 11:52 AM



PREPARED FOR: C&D LANDFILL DAVIDSON COUNTY, NORTH CAROLINA SEEP PATH SAMPLE LOCATIONS	DRAWN: J.A.L.	APPROVED:	SCALE: AS SHOWN	DATE: Jun 2016	PREPARED BY: _____ <small>NC LIC. NO. C-0828 [ENGINEERING]</small>
	PROJECT NO.: DAVDCO 15-9	FIGURE NO.: 1	FILENAME: DAVDCO-A0815	SMITH+GARDNER <small>14 N. Boylan Avenue, Raleigh NC 27603 919.828.0577</small>	
	© 2016 Smith Gardner, Inc.				



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Table with columns for Unit Type (Lined MSWLF, Closed MSWLF, CDLF) and checkboxes for various waste types (LCID, YW, Transfer, Compost, SLAS, HHW, White goods, Incin, T&P, FIRM, Tire T&P/Collection, Tire Monofill, Industrial Landfill, DEMO, SDTF). Includes County: Davidson, Permit No.: 2906, File Type: COMPLIANCE.

Date of Site Inspection: 06/02/2016 and 6/10/2016

Date of Last Inspection: 06/12/2015

FACILITY NAME AND ADDRESS:

Davidson County Integrated Solid Waste Management Facility
220 Davidson County Landfill Road
Lexington, NC 27292

GPS COORDINATES: N: 35.85281° W: 80.17620°

FACILITY CONTACT NAME AND PHONE NUMBER:

Name: Rex Buck, Public Services Director
Telephone: 336-242-2008
Email address: rex.buck@davidsoncountync.gov

FACILITY CONTACT ADDRESS:

P. O. Box 1067
Lexington, NC 27293-1067

PARTICIPANTS:

Steven Sink, Landfill Supervisor
Angela Jones, Administrative Assistant
Deb Aja, Western District Supervisor, Solid Waste Section
Susan Heim, Environmental Senior Specialist, Solid Waste Section

STATUS OF PERMIT:

2906-MSWLF-1994: Closed
2906-MSWLF-2008: Issued 7/14/2014; Expires 5/28/18
2906-CDLF: Issued 5/28/2013; Expires 7/18/2018
2906-HHW: Issued 7/14/2014; Expires 5/28/2018

PURPOSE OF SITE VISIT:

Comprehensive Inspection

STATUS OF PAST NOTED VIOLATIONS:

None

OBSERVED VIOLATIONS:

- 1. 15A NCAC 13B .0203(d) states: "By receiving solid waste at a permitted facility, the permittee(s) shall be considered to have accepted the conditions of the permit and shall comply with the conditions of the permit." Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part I, Item 6 states, "Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes, the conditions contained in this permit, and the approved plan." Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part I, Item 7 states, "This permit is issued based on the documents submitted in support

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 2 of 13

of the application for permitting the facility including those identified in the “List of Documents for the Approved Plan” which constitute the approved plan for the facility.” Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part VI, lists *Response to Review Comments w/Revised Operations Manual (July 2013)* as one of the documents for the Approved Plan. Section 2.3.1, Waste Receiving and Inspection, of the Revised Operations Manual (July 2013) states, “Vehicles are randomly selected for screening on a regular basis, depending on personnel available. At least one vehicle per week will be randomly selected by inspection personnel from each of the following locations: MSW landfill, C&D landfill, and transfer station. All random waste inspections will be documented by facility staff using the waste screening form provided in Appendix C.”

Davidson County is in violation of 15A NCAC 13B .0203(d) as a result of failing to perform and/or document the required waste screening provisions stated in the Revised Operations Manual (July 2013).

An inspection of the waste screening records for the C&D landfill and the active MSW landfill revealed deficiencies in the number of waste screenings performed and/or documented. For the C&D facility the following months indicated fewer screenings than required: July 2015, September 2015, October 2015, November 2015, December 2015, January 2016, February 2016, March 2016, April 2016. For the MSW facility, deficiencies occurred in December, 2015, November 2015, October 2015 and August 2015.

To achieve compliance, Davidson County must immediately perform the required number of random waste screenings and maintain required records of same.

C&D Landfill:

2. 15A NCAC 13B .0542(f)(1) states: “the owners and operators of all C&DLF units must cover the solid waste with six inches of earthen material when the waste disposal area exceeds one-half acre and at least once weekly. Cover must be placed at more frequent intervals if necessary to control disease vectors, fires, odors, blowing litter, and scavenging.”

Davidson County is in violation of 15A NCAC 13B .05042(f)(1) by failing to adequately cover waste on the working face at least weekly and in previous fill areas, and by not covering at intervals frequently enough to control blowing litter. A review of the cover log indicated an 8-day period from 04/19/2016 through 04/28/2016 during which no cover was applied.

Upon initial inspection on 6/2/2016, the working face of the C&D landfill was observed to have inadequate cover, thus allowing waste to remain exposed and to become windblown. (Note that the waste stream is composed of large loads fiberglass strands.)

During the completion of the inspection on 6/10/2016, significant progress had been made in the placement of cover on both the working face and on areas of previous fill.

To achieve compliance, Davidson County must immediately apply cover to areas where waste is exposed to achieve a 6 inch layer of soil, as required by 15A NCAC 13B. 05042(f)(1).

3. 15A NCAC 13B .0542(l)(4) states: “Leachate must be contained on-site or treated prior to discharge.”

Davidson County is in violation of 15A NCAC 13B .05042(l)(4) by failing to capture leachate or to treat it prior to discharge.

Upon initial inspection on 6/2/2016, ponding liquid was observed at the toe of the working face, along with a trail of liquid flow along the access roadway following the edge of waste downhill to an inert debris stockpile area, then out into the open area between the closed Phase 1 MSWLF and the active CDLF.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 3 of 13

During the completion of the inspection on 6/10/2016, some progress had been made through the construction of a temporary berm which appeared to be containing much of the leachate emanating from the C&D landfill unit.

To achieve compliance, Davidson County must contact Jaclynne Drummond, Solid Waste Section Hydrogeologist, at 828-296-4706 within ten (10) days of receipt of this report to present a sampling plan, to be implemented immediately upon her approval, which will evaluate the extent of any potential environmental impact resulting from these leachate releases. The results of this evaluation will dictate any additional corrective measures to be required. Please see the attached Notice of Violation letter for additional information about required corrective measures.



C&D landfill working face - observed 6/2/2016.



Close up view of leachate runoff at C&D landfill working face -- observed 6/2/2016.



Improved cover and temporary berm to prevent leachate runoff at C&D landfill working face – observed 6-10-2016.

MSW Landfill:

- 15A NCAC 13B .1626(2)(a) states: “the owners and operators of all MSWLF units must cover disposed solid waste with six inches of earthen material when the waste disposal at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.”

Davidson County is in violation of 15A NCAC 13B .1626(2)(a) by inadequately covering disposed solid waste at the end of each operating day.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 4 of 13

Upon initial inspection on 6/2/2016, the working face of Phase 2, Cell 2A of the MSW landfill was observed to have inadequate cover, thus allowing waste to remain exposed and to become windblown. In addition, the operating record indicating dates and times of placement of daily cover showed that the last time daily cover had been applied was the previous week.

During the completion of the inspection on 6/10/2016, significant progress had been made in the placement of adequate daily cover on the working face of Phase 2, Cell 2A of the MSW landfill.

To achieve compliance, Davidson County must apply cover to areas where waste is exposed to achieve a 6 inch layer of soil as required by June 30, 2016.



Inadequate cover of waste, looking down the side slope toward new cell construction 6/2/2016.



Inadequate cover of waste, looking up the side slope toward the working face 6/2/2016.

5. 15A NCAC 13B .1626(7)(a) states: "Adequate sediment control measures shall be utilized to prevent silt from leaving the MSWLF facility."

Davidson County is in violation of 15A NCAC 13B. 1626 (7)(a) by failing to prevent silt from leaving the MSWLF facility.

Upon initial inspection on 6/2/2016, the entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion, where silt containing exposed waste had flowed through the silt fencing and into the area of the as yet unlined portion of the new cell (Ph. 2, Area 2, Cell 2A and 2B) which is currently under construction.

During the completion of the inspection on 6/10/2016, significant corrective action had been initiated. Steven Sink, Landfill Supervisor, stated on 6/10/2016 that the area had been regraded, additional soil cover applied, and hydro-seeding had taken place. Straw cover over the entire area was observed.

To achieve compliance, Davidson County must ensure that erosion control measures are sufficient to prevent silt from leaving the MSWLF facility and to prevent on-site erosion.

6. 15A NCAC 13B .1626(7)(b) states: "Adequate sediment control measures shall be utilized to prevent on-site erosion."

Davidson County is in violation of 15A NCAC 13B. 1626 (7)(b) by failing to prevent on-site erosion.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 5 of 13

Upon initial inspection on 6/2/2016, the entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion, which had resulted in the development of deep ruts and gullies along the entire slope leading directly to the unlined portion of the new cell (Ph. 2, Area 2, Cell 2A and 2B) which is currently under construction.

On 6/10/2016, significant corrective action had been initiated to control erosion, including regrading and hydro-seeding to establish a vegetative cover.

To achieve compliance, Davidson County must ensure that erosion control measures are sufficient to prevent on-site erosion. The slope must be inspected regularly to ensure it remains intact as the vegetative cover sprouts and becomes established.

7. 15A NCAC 13B .1626(7)(c) states: "Provisions for a vegetative ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of MSWLF development."

Davidson County is in violation of 15A NCAC 13B. 1626 (7)(c) by failing to provide for a vegetative cover sufficient to restrain erosion within 30 working days or 120 calendar days of completion of any phase of MSWLF development.

Upon initial inspection on 6/2/2016, the entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion. The slope leading down to the area of new cell construction was observed to have no vegetative cover established that would prevent erosion.

To achieve compliance, Davidson County must ensure that sufficient vegetative cover is established on the landfill slopes to prevent erosion. Vegetation must be well established to determine if compliance has been achieved.



View of erosion from the side slope of the active landfill looking toward the unlined cell 2A, currently under construction.

FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management

Solid Waste Section

Page 6 of 13



View of erosion and sediment flow along the silt fence protecting the area of new cell construction.



View of erosion and sediment flow as seen from the berm of the new landfill cell looking up the slope to the protective silt fence.

ADDITIONAL COMMENTS

1. The facility consists of a closed MSW landfill (Phase 1), an active MSW landfill (Phase 2), a C&D landfill, an HHW collection facility, scrap tire collection and processing facility, white goods collection and processing facility, a collection area for scrap metals, a convenience center for the drop-off of household textiles, electronics and televisions, and certain residential recyclables, and a Solid Waste Transfer Station. The site also contains a landfill gas to energy facility, operated by DTE, and located adjacent to the closed (Phase 1) MSW landfill.
2. An inspection of all aspects of operations covered under Permit to Operate No. 2906 were inspected on 6/2/2016. However, additional records were reviewed onsite on 6/10/2016. Preliminary corrective actions were also observed at the facility on this date.
3. The facility is permitted to receive waste generated within Davidson County. However, the county may extend the service area to include surrounding counties including Guilford, Forsyth, Davie, Rowan Stanley, Montgomery and Randolph. Mr. Sink stated that the county still maintains a service area of Davidson County only.

Records Review:

4. The current Permit to Operate (dated July 14, 2014) and Revised Operations Manual (dated July 31, 2013) were available and reviewed. The operations manual includes a procedures manual for the HHW collection program.
5. Tonnage reports for the active MSW landfill, the C&D landfill and the transfer station were reviewed. For the period January 1, 2016 through March 31, 2016, the MSW landfill accepted 24,930.36 tons of waste for disposal; the C&D landfill accepted 5,433.52 tons of waste for disposal; and, 540.68 tons of waste were accepted at the transfer station. Mr. Sink advised that the transfer station operation had been closed down due to the winding down of operations at the C&D landfill, which is very close to capacity at this time.
6. Scrap tire trailers are removed and replaced as they are filled. For the month of April 2016, records indicated a total of 125.17 tons of scrap tires were collected at the facility. Scrap tire certification forms were reviewed for completeness.
7. White goods program records showed a total of 69.32 tons of white goods had been collected and processed at the facility, with the last load having been transported for disposal on March 31, 2016.
8. The electronics and television recycling program is contracted through PowerHouse Recycling, Inc., a certified recycler. On 6/2/2016, records indicated the last load of 2.97 tons was transported from the facility for recycling on 01/20/2016. However, on 6/10/2016, records were produced showing another load, containing 9.7 tons was

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 7 of 13

transported on 06/03/2016.

9. The HHW program is operated by a contractor, Resource Recovery and Reduction, Inc. (3RC). Davidson County HHW is accepted at both the landfill site and at the contractor's facility in Forsyth County. The contractor report for the period July 1, 2015 through March 31, 2016 indicated a total weight of 17.05 tons of HHW had been received at the Forsyth County site. No reports were available for HHW accepted at the Davidson County landfill for that same time period. Per Mr. Sink, the last load of HHW hauled from the landfill site by the contractor was on 08/07/2015, and that load was comprised of materials collected through the end of the previous fiscal year (07/01/2014 – 06/30/2015).
10. Mr. Sink stated that the mobile home deconstruction/recycling program had been discontinued and that, as a result, there were no current records to review.
11. Mr. Sink advised that the asphalt shingle recycling program had also been discontinued and there were no current records to review.
12. Mr. Sink also stated that the mattress recycling program had been discontinued and there were no current records to review.
13. A review of training records and certifications revealed the following personnel with current SWANA certificates:
 - Danny Cox, Landfill Operations Specialist – expires 02/10/2018
 - Keith Cecil, Landfill Operations Specialist – expires 10/01/2016
 - Kenneth Biggs, Landfill Operations Specialist – expires 10/01/2016
 - Kenneth Biggs, Transfer Station Operations Specialist – expires 06/19/2016
 - Jamie Jarrell, Landfill Operations Specialist – expires 10/01/2016
 - Darrell Leonard, Transfer Station Operations Specialist – expires 06/19/2016
 - William Noonan, Transfer Station Operations Specialist – expires 03/23/2019
 - Michael Lankford, Manager of Landfill Operations – expires 06/06/2017
 - Michael Lankford, Landfill Operations Specialist – expires 11/15/2017
 - Michael Lankford, Transfer Station Operations Specialist – expires 06/19/2016
 - Sherri Robbins, Landfill Operations Specialist – expires 10/01/2016
 - Charlie Brushwood, Manager of Landfill Operations – expires 04/16/2018
 - Charlie Brushwood, Transfer Station Operations Specialist – expires 06/19/2016
 - Steven Sink, Manager of Landfill Operations – expires 04/30/2017
 - Steven Sink, Transfer Station Operations Specialist – expires 06/19/2016
14. Facility financial assurance has been received and reviewed by the Solid Waste Section.
15. The facility has a Title V Air Quality Permit, issued by the Division of Air Quality. The last Air Quality inspection took place in April 2016.
16. The facility has a discharge permit to pump and haul leachate to the City of Lexington's waste water treatment facility from both the Phase 1 lagoon and the Phase two storage tank. Pump and haul records were reviewed for the time period January 2015 through May 31, 2016.
17. The facility is operated under NC General Storm Water Permit No. NCG120000, which expires 10/31/2017.
18. Semi-annual ground water monitoring records were reviewed for 2015. On April 14, 2015, 5 wells were sampled for the C&D landfill; 13 wells, 2 surface water locations and 1 leachate location were sampled for the closed MSW landfill (Phase 1); and, 11 wells, 2 surface water locations and 1 leachate location were sampled for the active MSW landfill (Phase 2).
19. Leachate storage tank inspection records were reviewed, indicating no issues with tank or system integrity.
20. A review of leachate line flushing and cleaning records for the period November 2012 through November 2015 showed an annual flushing and cleaning regimen, with the last having occurred on November 25, 2015. In addition, all lines were televised on December 11, 2013. Leachate line maintenance activities are performed by a contractor – JetClean, Inc.
21. Landfill gas monitoring records were reviewed for both the active (Phase 2) MSW landfill and the inactive (Phase 1) MSW landfill. Sampling events occurred on 06/29/2015, 09/24/2015, 12/29/2015 and 03/10/2016 at both sites, with all wells 1 through 9 being sampled at Phase 2 and all wells 1 through 13 being sampled. No landfill gas was detected as a result of these sampling events.
22. The record of daily cover was reviewed for the active MSW landfill (Phase 2). The log includes information about the type of cover used at the end of the day on the working face (i.e., tarp, soil or both), weather conditions, rain

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 8 of 13

totals and the operator's initials. The record appeared to be complete and in compliance.

23. The record of weekly cover was reviewed for the C&D landfill from 01/01/2016 through 06/02/2016. This log indicated an 8-day lapse in required cover being applied from 04/19/2016 until 04/28/2016. **Please ensure that adequate cover is applied at least every seven days and that coverage is noted in the operating record. See observed violations section of this report.**
24. Random waste screening logs were examined for both the C&D landfill and the MSW landfill, indicating deficiencies in the number of screenings at both facilities for the current fiscal year. (See observed violation in this report for more information.)
25. Records of approvals for submitted waste determinations were provided for review, however none of the reports and analyses that were submitted for review were available for inspection.
26. **Please ensure that records of waste determination submittals, including analyses and laboratory reports as well as approvals, are collected and maintained for future inspection.**

Transfer Station:

27. An inspection of the transfer station revealed the facility was not currently in use. The facility appeared clean and well maintained. The loading floor was currently being used to store pallets of televisions and CRT monitors collected through the electronics recycling program. Mr. Sink stated that the transfer station had been closed due to the discontinuation of normal C&D operations.

HHW Collection Facility:

28. The facility is operated by a contractor – Resource Recovery and Reduction, Inc. (3RC) – and is permitted to accept materials from Davidson County residents at the landfill site and also at the contractor's facility in Forsyth County.
29. Hours of operation at the landfill site are 9 am to 3 pm on the first Saturday of each month.
30. Storage and unloading areas for HHW are covered. An emergency drain and sump is located in the center of the unloading area.
31. A container for the solidification of latex paint is located in the paint storage area. Solidified latex paint is taken to the MSW landfill for disposal, along with non-hazardous residuals collected at the site.
32. The collection/storage area was observed to be relatively clean and organized, as were the storage sheds for fluorescent lamps, oil based paints and paint products and other hazardous wastes. The entire area was full when observed both on 06/02/2016 and 06/10/2016. A large number of full gaylords and drums were palletized and ready for transport. The entire paint storage area was filled with palletized 1- and 5-gallon cans of paint. According to Mr. Sink, the last materials were removed from the site on August 7, 2015; these materials were collected during the previous fiscal year.
33. **Please ensure that HHW collected at the landfill site are processed, palletized and transported for proper disposal in a timely manner in order to provide for a safe working environment and a safe storage location for the materials collected.**

Closed MSW Landfill (Phase 1):

34. This landfill stopped accepted waste in November 2009, and began the 30-year post-closure maintenance program on May 28, 2013.
35. Permanent edge of waste markers were observed to be in place as required.
36. The landfill cap appeared to be intact and maintained. Mr. Sink stated that the vegetation is mowed annually.
37. On 06/02/2016, a number of small trees were observed to be growing in the area of the edge of waste and in the drainage channels on the landfill slope along the northern side of the landfill. On 06/10/2016, many of these small trees had been removed.
38. **Please ensure that regular observation and maintenance of the closed facility is carried out as required by the Revised Operations Manual (July 2013). Failure to do so may result in damage to the required landfill cap that is currently in place.**
39. The leachate lagoon was observed to have adequate capacity and to be properly fenced, gated and locked.
40. Observed monitoring wells appeared to be properly labeled and locked. **Please ensure that regular maintenance occurs in order to ensure accessibility to the monitoring wells at all times.**

FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management

Solid Waste Section

Page 9 of 13

Active MSW Landfill (Phase 2):

41. Current landfill operations were observed to be taking place in Phase 2, Area 2, Cell 1. Remaining capacity in this cell is expected to run out in the near future.
42. Future Phase 2, Area 2, Cell 2 is under construction, with a completion target date in July 2016.
43. The working face of the landfill appeared to be understaffed, with two equipment operators and no spotter to direct loads for tipping. The tipping area did not appear to be well defined, and as a result several residential vehicles appeared to be unsure as to how to proceed with unloading. Access and egress lanes were not apparent, and traffic control at the working face was not sufficient to ensure the safety of staff and the public. A small pick-up truck was observed to have had a near miss with a garbage truck in the tipping area. **Please ensure that the tipping area is well defined and that sufficient traffic control is exercised to provide a safe and efficient working face at all times during facility operations.**
44. The facility is approved for the use of tarps for alternative daily cover, and a small tarp was observed onsite.
45. Waste in areas surrounding the working face had inadequate cover, as did the entire northern slope of the cell.
46. Inadequate cover has led to unacceptable amounts of windblown litter around the site. **Please ensure that windblown litter is picked up daily, and that cover is adequate to reduce the incidence of windblown litter at the facility.**
47. On the slope immediately adjacent to the new cell construction, poor waste coverage and serious erosion issues were seen to have resulted in the flow of sediment and waste into the area of the as yet unlined new Cell 2A. (See observed violations for additional information.)
48. **Please ensure that regular inspections and routine maintenance of the landfill slopes are performed as required.**
49. Internal roadways are of all-weather construction. Maintenance of the roadway in the area approaching the working face is needed to ensure safe, reliable access and egress of vehicles and equipment.
50. Observed monitoring wells appeared to be properly labeled and locked. **Please ensure that regular maintenance occurs in order to ensure accessibility to the monitoring wells at all times.**
51. The leachate tank and impoundment were inspected. The tank level was observed to be at 11', and the tank itself appeared to be in good condition. The impoundment was observed to be clean and well maintained with adequate secondary containment capabilities. An all-weather access road surrounds the entire impoundment area and was observed to be well maintained.

C&D Landfill:

52. The C&D landfill is no longer open for normal operations; waste is received only from PPG for a specific waste stream of fiber/fiberglass filament. Other C&D loads are directed to the MSW landfill for disposal.
53. The facility is close to capacity, and Mr. Sink stated that he anticipates that C&D landfill operations will cease within the next few months.
54. A large working face was observed with a steep slope. **Please ensure that landfill slopes are maintained at a safe grade (4:1) in order to facilitate safe equipment operation and adequate compaction.**
55. The access road was of all-weather construction and well maintained.
56. Edge of waste markers were not in place in all areas as required. **Please ensure that permanent edge of waste markers are placed and maintained as required.**
57. Ponding and flowing liquid were observed at the toe of the working face. The flow appeared to follow the perimeter of the landfill to the inert debris storage area and down into the area between the C&D landfill and the closed MSW landfill. On 06/10/2016, a partial temporary berm was observed that appeared to be stopping the flow of water from the C&D site. (See observed violations for additional information.)
58. **Develop and submit for approval to the Solid Waste Section a plan for the separation and management of storm water and leachate at the C&D facility by June 30, 2016.**

White Goods Collection Facility:

59. Davidson County acquired a CWARR grant to build and outfit the white goods collection site. The site includes a building for equipment storage, concrete pads for accepting, sorting and processing white goods and scrap metals, CFC removal equipment and a compactor for compacting white goods prior to transporting for sale.
60. Currently, all white goods operations are handled through outside contracts for CFC removal, transportation and

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 10 of 13

recycling/disposal.

61. At the time of the inspection, the white goods area was observed to be full. Units containing CFCs were not properly staged to ensure that gas lines remained intact and the CFCs safely contained. Mr. Sink stated that a contact was currently being negotiated to provide for CFC evacuation and removal of the accumulated white goods and scrap metals.
62. **Please ensure that white goods are handled and stored properly to eliminate the unintentional release of CFC gases at the site. In addition, please ensure that white goods are removed from the site in a timely manner so that adequate space is available for safe storage of the materials received.**

Scrap Tire Collection Areas:

63. Scrap tire disposal is contracted through U.S. Tire, and the contractor provides trailers at the C&D landfill/Transfer Station area of the facility.
64. Scrap tire certification forms are collected at the scale house, and customers load tires directly into the trailers for disposal.
65. Trailers were observed to be in good condition, and the unloading areas clean and well maintained with easy access.

Other Facility Operations:

66. A convenience area is operated near the C&D landfill for residential drop-off of small vehicle loads of MSW, residential recyclables, electronics and televisions, textiles and clothing, used cooking oil, lead acid batteries, propane tanks, automobile radiators, motor oil and used oil filters.
67. The convenience area appeared to have adequate space for safe ingress and egress and traffic flow.
68. The electronics and television collection area was full at the time of this inspection. Electronics recycling and disposal is contracted through PowerHouse Recycling, Inc.
69. The date of the last electronics load transported from the facility was 01/20/2016. On 06/10/2016, paperwork was provided showing that an electronics load, comprised of some of the palletized televisions and monitors stored inside the transfer station building, had been transported on 06/03/2016. The collection area was still full at the time it was observed on 06/10/2016.
70. A fire notification was received by the Solid Waste Section relating to a fire in the electronics storage area on May 28, 2016. Fire destroyed a substantial pile of computer monitors and televisions, however, the debris had been removed for proper disposal at the MSW landfill by the time of this inspection.
71. Approximately 50 pallets of televisions and computer monitors were wrapped and palletized for transport, and were being stored in the loading area of the closed transfer station.
72. The remainder of uncovered space around the transfer station building and the building used for OCC collection was filled with random piles of unsorted, unprocessed electronics and televisions.
73. **Please ensure adequate staffing to safely and properly sort, stack and store incoming electronics and televisions at the site.**
74. **Please ensure the timely removal of electronics and televisions for recycling/disposal.**
75. A landfill gas extraction plant, operated by contractor DTE, is located adjacent to the inactive Phase 1 MSW landfill. The facility appeared to be well maintained, and the monitoring points that were observed were well marked, locked and accessible.
76. **During the inspection, a number of concerns, including improper management of white goods and electronics received at the facility and lack of required maintenance in numerous areas of operation, were explained by facility staff as being due to insufficient personnel to manage and undertake these activities. Please note that 15A NCAC 13B .1604(2)(I) states: "Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures."**

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section



North slope of active MSWLF with uncovered waste, severe erosion and sediment flow adjacent to unlined landfill cell construction.



Electronics and television storage area.



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section



HHW collection and storage area.



White goods collection and storage area.



FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management

Solid Waste Section

Page 13 of 13

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 also 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.

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

Phone: 336-776-9672

Susan Heim
Environmental Senior Specialist
Regional Representative

Sent on: June 20, 2016 to Zeb Hanner.	<input checked="" type="checkbox"/>	Email		Hand delivery		US Mail	<input checked="" type="checkbox"/>	Certified No. <u>70111570000185455820</u>
--	-------------------------------------	-------	--	---------------	--	---------	-------------------------------------	---

Copies: Jason Watkins, Field Operations Branch Head – Solid Waste Section
Deb Aja, Western District Supervisor – Solid Waste Section
Jaclynne Drummond, Hydrogeologist – Solid Waste Section
Jessica Montie, Compliance Officer – Solid Waste Section
Rex Buck, Public Works Director – Davidson County
Steven Sink, Landfill Supervisor – Davidson County



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

MICHAEL SCOTT
Director

June 20, 2016

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 1570 0001 8545 5820

Mr. Zeb Hanner, County Manager
Davidson County
913 Greensboro Street
P. O. Box 1067
Lexington, NC 27292

SUBJECT: Notice of Violation
Compliance Inspection Report
Davidson County Solid Waste Management Facility
Permit No. 2906
Davidson County

Dear Mr. Hanner:

On June 2, 2016 and June 10, 2016, Susan Heim and Deb Aja (June 2, 2016 only), representing the State of North Carolina, Division of Waste Management Solid Waste Section (Section), inspected the above referenced facility for compliance with North Carolina solid waste statutes and rules. Steven Sink, Landfill Supervisor, and Angela Jones, Administrative Assistant, were present and represented the Davidson County Solid Waste Management Facility during this inspection. The following violation(s) were noted:

A. 15A NCAC 13B .0203(d) states: ““By receiving solid waste at a permitted facility, the permittee(s) shall be considered to have accepted the conditions of the permit and shall comply with the conditions of the permit.” Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part I, Item 6 states, “Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes, the conditions contained in this permit, and the approved plan.” Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part I, Item 7 states, “This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in the “List of Documents for the Approved Plan” which constitute the approved plan for the facility.” Permit to Operate No. 2906, Attachment 1, General Permit Conditions/Information, Part VI, lists *Response to Review Comments w/Revised Operations Manual (July 2013) as one of the documents for the Approved Plan. Section 2.3.1, Waste Receiving and Inspection, of the Revised Operations*

Manual (July 2013) states, “Vehicles are randomly selected for screening on a regular basis, depending on personnel available. At least one vehicle per week will be randomly selected by inspection personnel from each of the following locations: MSW landfill, C&D landfill, and transfer station. All random waste inspections will be documented by facility staff using the waste screening form provided in Appendix C.”

Davidson County is in violation of 15A NCAC 13B .0203(d) as a result of failing to perform and/or document the required waste screening provisions stated in the Revised Operations Manual (July 2013). A review of the waste screening logs indicated a deficiency in the number of waste screenings during the months of July 2015, August 2015, September 2015, October 2015, November 2015, December 2015, January 2016, February 2016 and March 2016.

B. 15A NCAC 13B .0542(f)(1) states: “the owners and operators of all C&DLF units must cover the solid waste with six inches of earthen material when the waste disposal area exceeds one-half acre and at least once weekly. Cover must be placed at more frequent intervals if necessary to control disease vectors, fires, odors, blowing litter, and scavenging.”

Davidson County is in violation of 15A NCAC 13B .05042(f)(1) by failing to adequately cover waste on the working face at least weekly and in previous fill areas, and by not covering at intervals frequently enough to control blowing litter. A review of the cover log indicated an 8-day period from 04/19/2016 through 04/28/2016 during which no cover was applied.

C. 15A NCAC 13B .0542(l)(4) states: 15A NCAC 13B .0542(l)(4) states: “Leachate must be contained on-site or treated prior to discharge.”

Davidson County is in violation of 15A NCAC 13B .05042(l)(4) by failing to capture leachate or to treat it prior to discharge. Ponding liquid was observed at the toe of the working face, along with a trail of liquid flow along the access roadway following the edge of waste downhill to an inert debris stockpile area, then out into the open area between the closed Phase 1 MSWLF and the active CDLF.

D. 15A NCAC 13B .1626(2)(a) states: “the owners and operators of all MSWLF units must cover disposed solid waste with six inches of earthen material when the waste disposal at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.”

Davidson County is in violation of 15A NCAC 13B .1626(2)(a) by inadequately covering disposed solid waste at the end of each operating day. The working face of Phase 2, Cell 2A of the MSW landfill was observed to have inadequate cover, thus allowing waste to remain exposed and to become windblown. In addition, the operating record indicating dates and times of placement of daily cover showed that the last time daily cover had been applied was the previous week.

E. 15A NCAC 13B .1626(7)(a) states: “Adequate sediment control measures shall be utilized to prevent silt from leaving the MSWLF facility.”

Davidson County is in violation of 15A NCAC 13B. 1626 (7)(a) by failing to prevent silt from leaving the MSWLF facility. The entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion, where silt containing exposed waste had flowed through the silt fencing and into the area of the as yet unlined portion of the new cell (Ph. 2, Area 2, Cell 2A and 2B) which is currently under construction.

F. 15A NCAC 13B .1626(7)(b) states: “Adequate sediment control measures shall be utilized to prevent on-site erosion.”

The entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion, which had resulted in the development of deep ruts and gullies along the entire slope leading directly to the unlined portion of the new cell (Ph. 2, Area 2, Cell 2A and 2B) which is currently under construction.

G. 15A NCAC 13B .1626(7)(c) states: “Provisions for a vegetative ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of MSWLF development.”

The entire northern slope of the active landfill (Ph. 2, Area 2, Cell 1B) showed evidence of severe erosion. The slope leading down to the area of new cell construction was observed to have no vegetative cover established that would prevent erosion.

Based upon the foregoing, the Davidson County Solid Waste Management Facility shall come into compliance with all requirements of the regulations in 15A NCAC 13B by completing the following within the timeframes specified below in items 1 through 4:

1. **Immediately** adopt the procedures as set forth in Section 2.3.1 *Waste Receiving and Inspection* of the Revised Operations Manual (July 2013) (DIN 19418) for randomly screening incoming loads of waste at the MSW landfill, at the C&D landfill and, when in operation, the transfer station. Waste screening logs that indicate compliance with the required procedures will be made available for inspection and review by the Solid Waste Section in order to demonstrate compliance.
2. **Immediately** cover all exposed waste, both at the C&D landfill and the active MSW landfill and maintain adequate coverage, as required by **15A NCAC 13B .0542(f)(1)**.
3. **Within ten (10) days of receipt of this notice**, contact Jaclynne Drummond, Hydrogeologist, Solid Waste Section, at (828) 296-4706, and present a sampling plan, to be implemented immediately upon her approval, that will evaluate the extent of any

environmental impact resulting from leachate release at the C&D landfill and dictate any corrective actions required to bring the facility into compliance with **15A NCAC 13B .0504(I)(4)**.

4. To achieve compliance with all of the provisions of **15A NCAC 13B .1626(7)**, grade and adequately cover the northern slope of the active MSW landfill leading down to the area of new construction and establish a stable vegetative cover to prevent silt from leaving the facility and to prevent on-site erosion by **August 1, 2016**. Vegetative cover must be well established in order to demonstrate compliance.

The violation(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 also 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.

Please keep me informed of your progress in this matter Solid Waste Section staff will conduct a follow-up inspection(s) to verify that the facility has completed the requirements of this Notice of Violation.

I would welcome the opportunity to meet with you to discuss these issues in more detail. If you would like to do so, or if you have any questions please contact me at 336-776-9672 or e-mail me at susan.heim@ncdenr.gov.

Sincerely,

Susan Heim
Environmental Senior Specialist
Division of Waste Management - Solid Waste Section

copies: Jason Watkins, Field Operations Branch Head – Solid Waste Section
Deb Aja, Western District Supervisor – Solid Waste Section
Jessica Montie, Compliance Officer – Solid Waste Section
Rex Buck, Public Works Director – Davidson County
Steven Sink, Solid Waste Supervisor – Davidson County