



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:

Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: Harnett PERMIT NO.: 4303–CDLF–1997 FILE TYPE: COMPLIANCE
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM		
CDLF	<input checked="" type="checkbox"/>	Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		

Date of Site Inspection: October 31, 2013

Date of Last Inspection: September 31, 2013

FACILITY NAME AND ADDRESS:

Harnett County Anderson Creek C&D Landfill
 1086 Poplar Drive
 Spring Lake, NC 28390

GPS COORDINATES: N: 35.291432 E: -78.99537

FACILITY CONTACT NAME AND PHONE NUMBER:

Andrew Holland
 (910)-893-5626

FACILITY CONTACT ADDRESS:

Amanda L. Bader, PE, LEED AP County Engineer
 Harnett County Engineering and Facilities Management
 P.O. Box 2773
 Lillington, NC 27546
 Ph. 910-814-6156
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 abader@harnett.org

PARTICIPANTS:

Dennis E. Shackelford, NCDENR - DWM
 Elizabeth Werner, NCDENR - DWM
 Sarah Rice, NCDENR - DWM
 Ming-Tai Chao, NCDENR - DWM
 Randy Smith – Harnett County Solid Waste
 Andrew Holland – Harnett County Solid Waste
 Pieter Scheer, P.E. – S+G Engineers
 Joan Smyth, P.G. – S+G Engineers

STATUS OF PERMIT:

Permit to Operate issued January 5, 2007
 Permit currently under review

PURPOSE OF SITE VISIT:

Scheduled Meeting

STATUS OF PAST NOTED VIOLATIONS:

None

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OBSERVED VIOLATIONS

1. None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

1. The purpose of the meeting was to discuss the needed permit information and to discuss French drain lines that were installed in waste that drained into an approved sump.
2. Permit to Operates (43-03) for C&DLF – Phases 1 & 2 expired. The Operations Plan for CDLF – Phases 1 & 2 (Doc ID 19835) was received and under reviewed.
3. Permit to Construct (PTC) Application (43-03) for C&DLF – Phase 3 (Doc IDs 19382) and SSR/design hydro report (Doc ID 19383) had been received and reviewed by Solid Waste Section (SWS). The SSR/design hydro report was approved on 8/16/13 (Doc ID 19542). Comments (Doc ID 19617) on the PTC –Phase 3 application have been issued to the County on 8/19/2013, and the SWS is waiting for the responses from the County.
4. The C&DLF is in compliance with Rule .0547 (2).
5. The observation of a section of French Drain that is located on the northeast /north side of the C&DLF - Phase 2 (See Photo Nos. 6 & 14) and extended along the on-site service road and drains to an on-site drainage feature immediately downstream a road culvert (See Photo Nos. 19 & 20). The discharged liquid seems likely clear without any odor. The soil/sediment in the flow path is stained by orange-brownish color. The (oil?) sheen was observed on top of the standing water immediately downstream of the discharge point. G+S and the County indicated that they suspected the French Drain may intercept surface water from sediment basin and groundwater underneath the landfill rather than drained leachate. However, the analytical test result was not available at the time of site visit to approve their proclamation. The County installed this section of French Drain without the SWS's approval. The County agreed to remove the French Drain prior to constructing Phase 3 including the additional expansion of Phase 2 area. The proposal and plan for removal of French Drain and the additional expansion of Phase 2 area is prepared by G+S.
6. The constructed Leachate Management Project was inspected. The sump was typically always covered by a wooden cover with a metal handle while it is not for inspection or maintenance. Load-out area that was located right next to the sump except for Sump A was typically lined by a layer of HDPE which is overlain by a layer of earthen material. An in-line cutoff switch is installed to control leachate flow; a ball valve and drain pipe are installed inside the load-out area to drain standing water to nearby sediment basin or surface drainage features. Ruts in the load-out areas need to be backfilled with proper fill material to prevent the underlying HDPE from damage by the tank truck or sunlight.
7. The Leachate Sump A (Photo No. 16) and its separated load-out area (Photo No. 17), approximately 200-ft south downhill of the Sump A, were inspected. Very strong landfill gas odor was detected by the olfactory sense. Murky liquid could be observed inside the sump (about 30-ft below the top grade surface).

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8. The Leachate Sump B and load-out area were inspected. Leachate seems clear and without strong odor, but landfill gas fume was observed inside the sump; the fume rose up to the ambient surroundings when the sump cover was removed. The leachate inside Sump B has not been pumped since June 15, 2013 and leachate level was low (about 15-ft below ground surface).
9. The Leachate Sump C and load-out areas were inspected. Leachate level inside the sump was low (about 5-ft below ground surface) and seems clear and without any odor.
10. The Leachate Sump D and load-out areas were inspected. Leachate level inside the sump was low (about 10-ft below ground surface) and seems clear and without any odor. Sump D has not been pumped since June 15, 2013. According to Randy Smith, the liquid level inside the sump may be impacted by the recharge of the surface water inside the sediment basin which is about 50-feet downhill from Sump D.
 - a. The County was proposing to remove the existing French Drain associated with Sumps B, C, & D and their load-out areas in addition to the section of French Drain on the north side of the C&DLF. The estimated schedule of three days to a week to complete this proposed task was provided by the County. The SWS suggested the County conducting the following tasks prior to submitting an official proposal: The historical data including the date and the amount leachate removed from each sump since the project began. A trend can be developed for each sump to determine if the leachate amount trickled down overtime.
 - b. Events of any leachate beaks out at the closed landfills before and after the project began. Data can be used to compare the chronological weather conditions, leachate breakout frequencies, and the performance of the installed system.
 - c. The existing French Drains and sumps (especially Sump B) may be the channel to passively emit the potential landfill gas to atmosphere. There is no landfill gas monitoring data is available for each sump to determine if the landfill gas exists at sump, and the olfactory sense is not defendable tool. Prior to removing of the system, mitigation or elimination of landfill gas migration vertically to the groundwater underneath the closed landfills must be considered and properly managed.
 - d. The landfill cover system must be properly restored which must be addressed in the proposal.
11. Permit status. S+G and the County are working on the responses to the DWM comments on C&DLF. They proposed to submit a permit application to continue operating both CDLF – Phases 1 & 2 and Transfer Station. This permit application will request SWS an approval of constructing and operating an additional area (about one acre or two) outside the existing Phases 1 & 2 area s but inside the future Phase 3 area where the design hydro has been approved. Should the County granted this approval, the County can continue operate the CDLF – Phases 1 & 2 & additional expansion areas and Transfer Station with valid & current permit [in compliance with Rule .0547(2)], and S+G would have adequate time to prepare a Facility Plan to comprehensively develop the future landfill development within the permitted property. The new Facility Plan will be subjected to a local government approval processes set forth in Rule .0536(c)(11).

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12. Digital pictures were taken during the inspection.

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

Dennis E. Shackelford

Phone: 910-433-3349

Dennis E. Shackelford
Eastern District Supervisor

Sent on: December 9, 2013		Email		Hand delivery	X	US Mail		Certified No.
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Copies:

Michael Scott, Solid Waste Section Chief
Robert Hearn, Environmental Senior Specialist
Sarah Rice, Compliance Officer
Jessica Montie, Compliance Officer
Pieter Scheer P.E., Smith Garner Engineers
Ming-tai Chao, Permitting Engineer



Sump at C&DLF

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Working Face



C&DLF facing West