



CITY OF DURHAM
DEPARTMENT OF WATER MANAGEMENT
101 CITY HALL PLAZA • DURHAM, NC 27701
919-560-4381 • FAX 919-560-4479
www.durhamnc.gov

Administration
919-560-4381
Customer Billing Services
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Wastewater Treatment
North - 919- 560-4384
South - 919-560-4386
Water Supply & Treatment
Williams - 919-560-4348
Brown - 919-560-4362
Water & Sewer Maintenance
919-560-4344

Re: LF Condensate Spill at the City of Durham Closed MSW Sanitary Landfill
Attn: Ervin Lane
Compliance Hydrogeologist
NC Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646
919-707-8288 (phone/fax)

Date: April 13, 2012

Dear Sir,

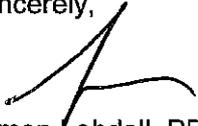
This report summarizes the occurrence of a spill of landfill gas condensate from the City of Durham's gas collection system. The spill occurred beyond the landfill compliance boundary, triggering this report. The spill was discovered on Friday March 2, 2012. Prompt action was taken to shut off all pumping operations and contain the spill. The spilled condensate entered a surface drainage swale and percolated or evaporated off the site of the spill. City of Durham Stormwater personnel performed an inspection on March 8, 2012. It was determined by field inspection that no direct discharge to surface water occurred. The inspection report is attached in Appendix 1.

During field investigations, it was determined that the existing ¾" force main was plugged somewhere between the final pump station and the discharge manhole. The City of Durham's maintenance personnel and Contractor (Methane Power Operations) rerouted a temporary above ground pipe to a holding tank that discharges to the City's sanitary sewer. Over the next 3 weeks, the City performed required location and subsurface exploration to reroute a permanent line.

The attached figures show the location of the spill relative to the landfill, the temporary line and the section of pipe that was believed to be plugged. No root cause has been determined for the plugging of the original line. The City is going to abandon the old line in place and rely on the new line. A second report will follow shortly describing the reroute and the commissioning of the new stretch of line. Golder Associates are currently under contract to perform soil sampling and assessment services at the site of the spill.

Thank you for your work and continued assistance in maintaining our compliance with our closure activities.

Sincerely,

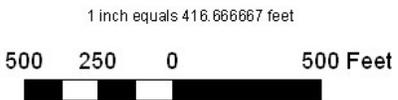

Simon Lobdell, PE
City of Durham, Department of Water Management.

Figures

City of Durham Landfill



Legend			
■	Extraction Well	●	Condensate Trap
—	Gas C collection Pipe	●	Condensate Cleanout
●	Isolation Valve	—	Condensate Pipe
▲	Gas Line Marker	—	Drainage Pipe
■	Condensate Pump	●	Gas Probe
●	Piezometer	●	Groundwater Well
●	Surface Water Monitor	◆	Temperature Probe



The following features were collected with a Trimble GeoXH GPS receiver, and post-processed using data from the City of Durham Continuously Operating Reference Station: Condensate Cleanouts, Drainage Pipes, Extraction Wells, Gas Line Markers, Gas Probes, Isolation Valves, Manhole, Temperature Probes. Accuracy ranges from sub-foot to sub-meter in open areas, and sub-meter to more than a meter in wooded areas for these features.

The following features were collected with an unknown GPS receiver by S & ME Inc., and it is not known if differential correction was applied: Groundwater Wells, Piezometers, Surface Water Monitors.



Existing Forcemain

Plugged section of 3/4" forcemain with pallel 2" forcemain from blower condensate holding tank

Durham County L

Discharge manhole

Camden Ave

E Club Blvd

Miss Laker Dr

Google

Imagery Date: May 31, 2007

© 2010 Europa Technologies

Image © 2010 Sanborn

© 2010 Google

36°01'39.93" N 78°51'38.65" W elev 298 ft

Eye alt 2503 ft

Appendix 1 - Storm water Inspection Reports

Water Quality Investigation #	12WQ066
ADC Map #	0874C06
Complainant First Name	Simon
Complainant Last Name	Lobdell
Mailing Address Line 1	Water Management Dept.
Mailing Address Line 2	Mist Lake Drive
Other Contact #	(919) 200-8870
Complainant Source	other City staff
Caller's Description of Problem	Discharge of landfill condensate from a City sanitary sewer force main.
Caller's Description of Location of Problem	Durham landfill on E. Club Blvd.
Complaint Date	3/5/2012
Complaint Time	15:10
First Callback Date	3/6/2012
First Callback Time	8:30
Initial Investigation Date	3/8/2012
Initial Investigation Time	15:45
Investigation Duration	0:45
Problem Identified?	<input checked="" type="checkbox"/>
Date Problem Identified	3/8/2012
Source Identified?	<input checked="" type="checkbox"/>
Date Source Identified	3/8/2012
Problem Resolved?	<input checked="" type="checkbox"/>
JB - Primary Investigator	<input checked="" type="checkbox"/>
Investigator's Description of Problem	Discharge of landfill condensate from a City sanitary sewer force main to a stormwater drainage ditch.
Nearest Street Address of Problem	1900 E Club Blvd
PropertyType	
Public Property?	<input checked="" type="checkbox"/>

Discharge to Storm Drain?	<input checked="" type="checkbox"/>
Discharge to Creek?	<input type="checkbox"/>
Latitude: N	36.02911
Longitude: W	-78.85673
Creek Name	Ellerbe Creek
SubBasin Name	Ellerbe
Other Water Quality Problem	<input checked="" type="checkbox"/>
Owner/Responsible Person Notification Not Needed	<input type="checkbox"/>
PhotoTaken?	<input type="checkbox"/>
Property Owner Name	City of Durham
Property Owner Address Line 1	1900 Camden Ave
Property Owner Address Line 2	Durham, NC 27704

AccessTotalsCRFile#: _____
1

**CITY OF DURHAM
STORMWATER SERVICES**

**WATER QUALITY COMPLAINT /
INSPECTION RECORD**

Location of investigation folder on F:Drive:
F:\SW\DivisionFiles\Quality\Docs\INVSTGTN\WQ Investigations\
WQ INVESTIGATIONS 2012\12WQ066 Landfill Con

Entered: 3/29/2012

Entered By: JWV

Report? RepDone

WQI File Number 12WQ066 (09WQ999)

ADC# 0874-C06 (###-L##)

Investigation Progress:

- Problem Identified
Date: 3/8/2012
 Source Identified
Date: 3/8/2012
 Resolved?

Complainant's Description of Problem and Location:

Complaint Description: Discharge of landfill condensate from a City sanitary sewer force main.

Complaint Location: Durham landfill on E. Club Blvd.

Complaint from:

Name: Simon Lobdell
Address: Water Management Dept.
Mist Lake Drive
HomePhone: _____
WorkPhone: _____
Other: (919) 200-8870

Complaint Date and Source:

- Date: 3/5/2012
Time: 15:10
 Call-In
 Hotline
 Walk-In
 e-mail
 WQSI
 Other City employee
 Other
 Referral from another person?

First Callback:

Date: 3/6/2012
Time: 8:30

Results Callback

- Date: 3/8/2012
 Phone
 Letter e-mail
 In Person
 Not needed

Initial Investigation:

Date: 3/8/2012
Time: 15:45

Duration: 0:45

- Team: JB BH
 MO SK
 JA BL
 MS Other

Field Observations:

Investigator's Description: Discharge of landfill condensate from a City sanitary sewer force main to a stormwater drainage ditch.

Street Address (nearest to prob): 1900 E Club Blvd

Street No. Street Name

Property Type:

- Also Public? Residential Commercial Institutional
 Industrial Unimproved

Commercial Use:

N/A

Observations:

- Sheen: _____
 Odor: _____
 Floatables: _____
 Other: _____

Drainage Basin:

Creek Name: Ellerbe Creek
Sub Bs: Ellerbe

- Discharge to storm drain
 Discharge to creek?

Downstream Ambient Site ID: _____ GIS?

GP (decimal degrees) Latitude: N 36.02911

Longitude: W -78.85673

Probable Source of Water Quality

Problem (check main items that apply):

Construction Erosion Sed.:

- Controls not provided
 Controls not maintained
 Sediment/debris in drainage system

On-site Sewage disposal

- Discharging sand filter system
 Failing septic system
 Piping failure, leak, etc.
 Laundry discharge

Private connection to City sewer system:

- Private sewer lateral
 Apt/Com lateral
 Other: _____

City Sanitary Sewer System (SS)

- Overflow
 Leak (small flow)
 Break (larger flow)
 SS Other: _____

Other:

- Illicit connection
 Commercial vehicle washing discharge
 Petroleum spill/release
 Paint spill/release/dumping
 Grease/cooking oil/food wastes
 Improper management practice
 Trash/garbage dumped in channel:
 Leaf & yard waste
 Contam. groundwater
 Water line break/leak
 Source unknown
 Other WQ problem
 Stream Buffer Violation
 No WQ problem found
 Water Quantity problem

Property Owner: City of Durham	Other Responsible Party:	Other Contact Person: Simon Lobdell
Phone #:	Phone #:	Title/Position: City of Durham - Utility Eng
Owner Address: 1900 Camden Ave	Mailing Address:	Phone #:
Durham, NC 27704		Cell Phone #: (919) 200-8870
Tax Map # (###-##-###)		

CR Investigation**Task Details**

- BH JB MO SK
 BL CO JA Other

Task Description: Initial investigation.

CR#: 12WQ066

Entered: 3/8/2012

Date: 3/8/2012 Duration: 0:45

 Task No: 1
 1=initial investigation;
 2,3,...for follow-ups

Entered By: JWB

Revised: 3/8/2012

Time: 15:45

Details of Investigation:

Simon Lobdell with Water Management called to report that there was a leak in the City's sanitary sewer force main at the Durham Landfill at 1900 E. Club Blvd. The force main line carries landfill condensate to the City's sanitary sewer system. The condensate (wastewater) discharged from the pump station to a stormwater drainage ditch and wetland area on 3/2/12. The City Hall rain gage recorded 1.05 inches between 3/2/12-3/4/12.

Jon Baker and Simon Lobdell left voicemail messages for each other, but work schedules did not allow for a meeting at the City Landfill until 3/8/12.

Mr. Lobdell provided a copy of analyses that were performed on a sample of the landfill condensate by Tritest Laboratory. See file for report.

Findings:

Simon Lobdell and Jon Baker met on 3/8/12 to inspect the site of the condensate spill at the Durham Landfill property. The drainage ditch downstream of the pump and force main was dry and there did not appear to be any evidence (visible/odor) of condensate water.

Actions:

Simon Lobdell informed Jon Baker that the discharge was stopped on 3/2/12 and a secondary pump was set up to transfer the condensate water to the City's sewer system at the Methane Power Generation Site at the landfill. Simon Lobdell will submit a report to the NC Division of Water Quality.

Owner/Responsible Person Notification:

- NOV Date Sent: _____
 Letter Date Sent: _____
 Phone Date: _____
 In Person Date: _____
 Penalty Letter Date Sent: _____
 Notification Not Needed

NOV / Letter Sent To:

1. _____
 2. _____
 Follow-up form(s)
 Photo Taken?

Referrals to :

- NC-DWQ
 NC-DLQ
 DC Health Dept. DC Engr. (SE-SW)
 WS Maint WS Engr WtrMgmt Prtrtmnt
 Plan/Zoning Public Works Eng.
 Housing / Com. Development Other

ChemTest Performed? Yes

Meters Calibrated?

Lab Analysis Sample Taken?

COC in file?

Lab Sample Name:

Subform: Select Investigation Task

Main Form: Select Investigation Records (CR/S/E)

CR File Number

12/MC06

Location

#Error

Water Quality Investigation #12WQ066_Details

Monday, April 02, 2012

9:58:11 AM

Water Quality Investigation Number	12WQ066
Initial Investigation Date	3/8/2012
Initial Investigation Time	3:45:00 PM
Investiation Duration	0:45

Details

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Responsible Person Notification Not Needed	<input checked="" type="checkbox"/>
Photo Taken?	<input checked="" type="checkbox"/>

AccessTotalsCRFile#: 1