

DENR USE ONLY:  Paper Report  Electronic Data - Email CD (data loaded: Yes / No )

Doc/Event #:

NC DENR  
Division of Waste Management - Solid Waste

**Environmental Monitoring  
Reporting Form**

**Notice:** This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

**Instructions:**

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

**Solid Waste Monitoring Data Submittal Information**

Name of entity submitting data (laboratory, consultant, facility owner):

Mecklenburg County Land Use & Environmental Services

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Dennis F. Tyndall, P.G.

Phone: (704) 336-5454

E-mail: Dennis.Tyndall@MecklenburgCountyNC.gov

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Harrisburg Road Landfill	7819 Harrisburg Road Charlotte, NC	60-01	.0500	June 23 & 25, 2008 and July 1 & 2, 2008

**Environmental Status: (Check all that apply)**

- Initial/Background Monitoring  Detection Monitoring  Assessment Monitoring  Corrective Action

**Type of data submitted: (Check all that apply)**

- Groundwater monitoring data from monitoring wells  Methane gas monitoring data  
 Groundwater monitoring data from private water supply wells  Corrective action data (specify) \_\_\_\_\_  
 Leachate monitoring data  Other(specify) \_\_\_\_\_  
 Surface water monitoring data

**Notification attached?**

- No. No groundwater or surface water standards or explosive methane gas limits were exceeded.  
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.  
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

**Certification**

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Dennis F. Tyndall, P.G.

Hydrogeologist

(707) 336-5454

Facility Representative Name (Print)

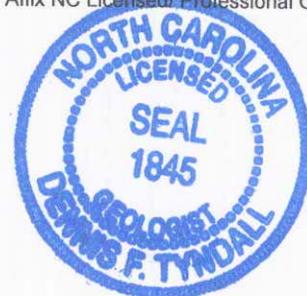
Title

(Area Code) Telephone Number

Signature

Date

Affix NC Licensed/ Professional Geologist Seal





MECKLENBURG COUNTY  
Land Use and Environmental Services Agency  
Water and Land Resources

March 5, 2009

Ms. Jaclyne Drummond  
North Carolina Department of Environment  
and Natural Resources  
Division of Waste Management  
Groundwater Compliance Unit  
Mail Service Center 1646  
Raleigh, NC 27699-1646

Subject: Water Quality Monitoring Report  
Harrisburg Road Landfill, Permit 60-01

Dear Ms. Drummond:

Mecklenburg County conducted semi-annual water quality monitoring at the closed Harrisburg Road Landfill June 23 thru July 2, 2008 in accordance with the approved revised sample and analysis plan dated May 11, 2004. Samples were collected from eleven monitoring wells (HBW-12A, HBW-12B, HBW-14, HBW-14B, HBW-14C, HBW-14D, HBW-17B, HBW-20, HBW-21, HBW-22 and background well HBW-28), two potable wells (HBW-744 and CLUBHS) and, three surface-water sampling locations (HB2006, HB2008 and, HB2010). Laboratory analytical data, field-measured data, and a table of results exceeding water quality standards along with a preliminary explanation of the cause and significance are included on the electronic data deliverable (EDD) submittal on the enclosed CD.

The EDD containing the monitoring data are labeled to reflect the units that are used for reporting. Detection levels and applicable standards have been included for all sampling locations. Surface water standards listed are the water quality standards established for freshwater classification for aquatic life as outlined in 15A NCAC 2B "Classification and Water Quality Standards Applicable to Surface Waters of North Carolina". Groundwater standards listed are the standards outlined in 15A NCAC 2L "Classification of Water Quality Standards applicable to the Groundwaters of North Carolina". If the sample is reported in parts per billion, then the standard is also reported in parts per billion.

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700 N. Tryon Street • Suite 205 • Charlotte, NC 28202-2236 • (704) 336-5500 • FAX (704) 336-4391  
[www.co.mecklenburg.nc.us/coenv](http://www.co.mecklenburg.nc.us/coenv)

**Surface-water samples:**

No analytes were detected in the samples collected from HB2006, HB2008 or HB2010. Field-measured parameters for surface-water samples were within the range of established standards and are summarized in the table below.

Location	Temperature	PH	Specific Conductivity	Dissolved Oxygen
HB2006	17.8 ° C	7.70	0.212 ms/cm	9.03 mg/l
HB2008	18.1 ° C	7.81	0.227 ms/cm	9.02 mg/l
HB2010	18.1 ° C	7.41	0.217 ms/cm	8.89 mg/l

**Groundwater samples:**

Cadmium and Lead were detected above the 2L standard in HBW-17B. No metals were detected above the 2L standard in any other sample. The table below summarizes metals detections in groundwater samples.

Well ID	Ba ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Ni ug/l	Pb ug/l	Vn ug/l	Zn ug/l
CLUBHS	-----	-----	-----	-----	-----	-----	-----	-----	120
HBW12A	-----	-----	-----	-----	-----	-----	-----	9.0	-----
HBW14	140	-----	-----	-----	22	-----	-----	8.9	-----
HBW17B	-----	<b>3.2</b>	5.5	19	77	-----	<b>38</b>	37	57
HBW-20	-----	-----	-----	-----	3.1	-----	-----	8.6	-----
HBW-21	-----	-----	-----	-----	2.8	-----	-----	7.0	-----
HBW-22	-----	-----	8.6	-----	-----	-----	-----	-----	-----
HBW-28	-----	-----	-----	13	8.4	-----	-----	-----	11
2L Std. ug/l	2,000	1.75	50	-----	1,000	100	15	-----	1,050

Note: Bolded results exceed 2L Standard

The following nine volatile organic compounds (“VOCs”) were detected in the sample collected from well HBW-17B:

VOC	Sample Result ug/l	2L Standard ug/l
<b>Acetone</b>	<b>32</b>	<b>700</b>
<b>Benzene</b>	<b>9</b>	<b>1</b>
<b>Methylene Chloride</b>	<b>15</b>	<b>5</b>
<b>Tetrachloroethylene</b>	<b>37</b>	<b>0.7</b>
<b>Trichloroethylene</b>	<b>24</b>	<b>2.8</b>
1,1-Dichloroethane	12	70
1,2-Dichloropropane	7	<b>0.51</b>
cis-1,2 Dichloroethene	70	70
Xylenes (total)	14	530

Note: Bolded results exceed 2L Standard

No VOC's were detected in any other samples.

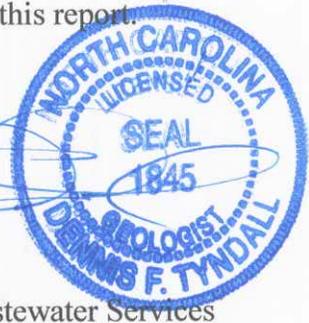
pH was measured to be more acidic than the standard in the samples collected from (HBW-12A, HBW-12B, HBW14, HBW14B, HBW14D, HBW17B, HBW-20, HBW-21, HBW-22 and background monitoring well HBW-28). Field-measured parameters for groundwater samples are summarized in the following table:

Location	Temperature	pH	Conductivity
HBW12A	15.6 °C	<b>6.12</b>	0.267 ms/cm
HBW12B	15.7 °C	<b>6.02</b>	0.306 ms/cm
HBW14	16.5 °C	<b>6.27</b>	0.226 ms/cm
HBW14B	15.1 °C	<b>6.36</b>	0.238 ms/cm
HBW14C	14.5 °C	<b>6.29</b>	0.200 ms/cm
HBW14D	14.5 °C	<b>6.21</b>	0.264 ms/cm
HBW17B	16.3 °C	<b>5.17</b>	0.059 ms/cm
HBW-20	18.6 °C	<b>6.28</b>	0.092 ms/cm
HBW-21	16.6 °C	<b>5.64</b>	0.592 ms/cm
HBW-22	17.8 °C	<b>5.72</b>	0.066 ms/cm
HBW-28	18.1 °C	<b>5.90</b>	0.043 ms/cm
HBW-744	18.0 °C	6.88	0.182 ms/cm
CLUBHS	17.3 °C	6.56	0.072 ms/cm

Note: Bolded results are outside of the 6.5 to 8.5 S.U. range 2L Standard

Please call me at (704) 336-5454, if you have any questions concerning this report.

Sincerely,

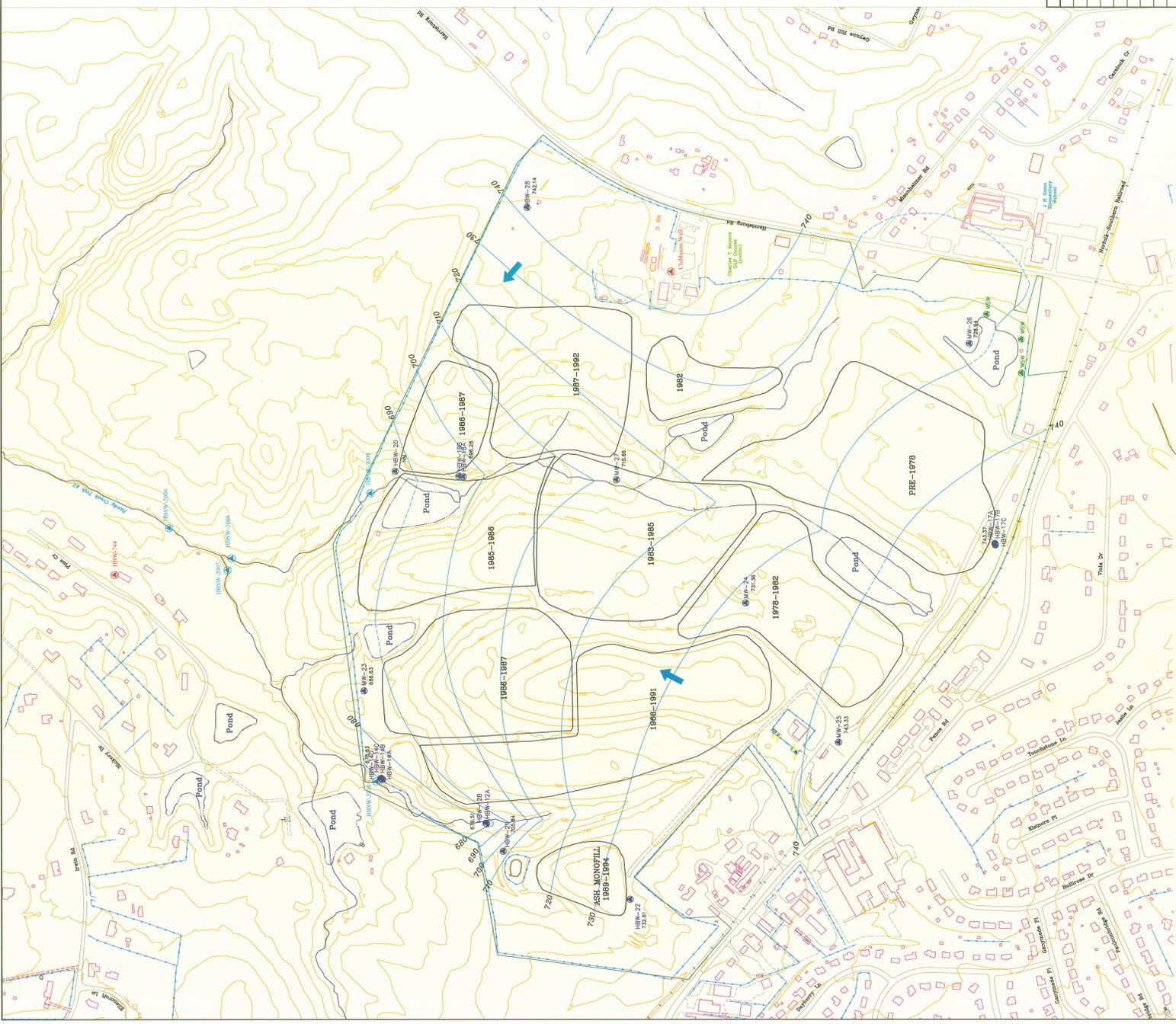
Dennis F. Tyndall, P.G.  
Hydrogeologist  
LUESA Groundwater and Wastewater Services

cc: Amber Lindon, P.G., Project Manager, LUESA Solid Waste Program



- LEGEND**
- MONITORING WELL
  - POTABLE WELL
  - WATER SUPPLY WELLS FOR IRRIGATION PURPOSES
  - APPROXIMATE WASTE WATER TREATMENT PLANT
  - APPROXIMATE WASTE WATER PLACEMENT
  - GROUNDWATER SURFACE (ESTIMATED WHERE DASHED)
  - GENERALIZED GROUNDWATER FLOW DIRECTION
  - PLANIMETRIC FENCING LINE CAPTURED AT PHOTOSCALE 1" = 1000'
  - SURFACE WATER CAPTURED AT PHOTOSCALE 1" = 1000'
  - TAX PARCEL BOUNDARY

- NOTES:**
1. ALL ON SITE WELL LOCATIONS WERE SURVEYED BY FDL ASSOC.
  2. GROUNDWATER DATA REFLECTS PUMPING CONDITIONS FROM WATER
  3. SURFACE-WATER SAMPLING SITES LOCATED USING GPS - SEPTEMBER 3, 2002
  4. GROUNDWATER SURFACE CONTOURS BASED ON SAME MAP DATED JUNE 4, 2001
  5. HBW-28 RENAMED FROM MW-28



SOURCE: MECKLENBURG COUNTY GIS AND GPS SURVEY FOR WELL LOCATIONS AND SAME MAP DATED JUNE 4, 2001

<b>SAMPLE LOCATION PLAN</b> HARRISBURG ROAD LANDFILL CHARLOTTE, NORTH CAROLINA	
SCALE: 1" = 300'	DRAWN BY: S. GREGORY
JOB NO: MAPGIS	DATE: 10/15/02
NO. DATE:	DESCRIPTION: