



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:

Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: GASTON PERMIT NO.: 36-01 FILE TYPE: COMPLIANCE
Closed MSWLF	X	HHW		White goods		Incineration		T&P		FIRM		
CDFL		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		

Date of Site Inspection: 1/10/12

Date of Last Inspection: Unknown

FACILITY NAME AND ADDRESS:

Cramerton Road MSW (Closed)
 413 Cramerton Road
 Cramerton, NC

GPS COORDINATES: N: 35.24438° E: -81.08851°

FACILITY CONTACT NAME AND PHONE NUMBER:

Marcie Smith - Solid Waste & Recycling Administrator
 Phone (704) 922-0267
 marcie.smith@co.gaston.nc.us
 Fax: (704) 922-5890

FACILITY CONTACT ADDRESS:

3155 Philadelphia Church Rd.
 Dallas, NC 28034

PARTICIPANTS:

Bill Wagner, Environmental Senior Specialist – Solid Waste Section.
 Phone: (828) 296-4705

STATUS OF PERMIT:

In-active: site closed.
 Closure effective on November 28, 1995

SITE HISTORY and BACKGROUND:

MSWLF Facility Permit No. 36-03	Issuance Date	Document ID No.
Landfill Operations Begun	November 1974	N/A
Landfill Stops Receiving Waste	October 1983	N/A
Landfill Closed – Closure Letter Issued i.a.w. 15A NCAC 13B .0510 to Gaston County (Permit Holder)	July 24, 1996	15877

PURPOSE OF SITE VISIT:

Comprehensive Audit

STATUS OF PAST NOTED VIOLATIONS:

N/A

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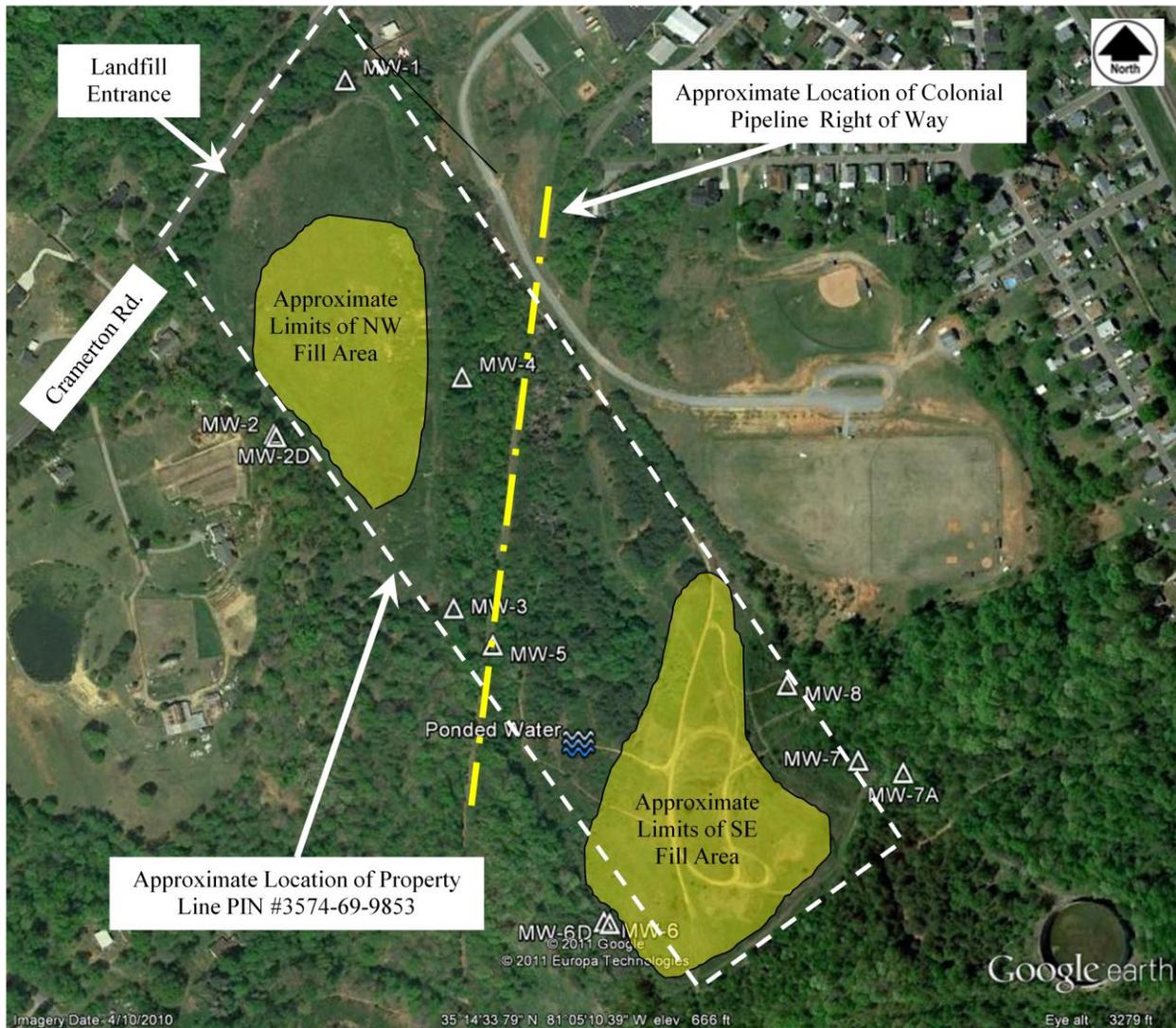


Figure 1: Google Earth Aerial: Cramerton Closed MSW Landfill 36-01
(Groundwater monitoring well locations verified 1/10/12 in the field.)

OBSERVED VIOLATIONS:

1. Landfill Gas Monitoring

15A NCAC 13B .1626(4)(b) which states in part “Owners or operators of all MSWLF units must implement a routine methane monitoring program.”; and the rule goes on to state “The minimum frequency of monitoring shall be quarterly.”

On November 8, 2001 Mark Poindexter (Solid Waste Section) sent a letter (enclosed) to Ray Maxwell (Gaston Co. Solid Waste Director) concerning the “*Phase 1 Site Assessment Report for the Gaston County Auten Road, Biggerstaff and Cramerton Closed Sanitary Landfills (Permit #36-3, 36-02, and 36-01)*”. Comments specific to the Cramerton Landfill included:

Item #5: “*Quarterly landfill gas monitoring is required at all municipal waste sites. The Section shall be notified that a landfill gas monitoring system has been installed and is being monitored on a quarterly basis. Additionally, the Section shall be notified if there is an exceedance of the regulatory threshold. Please provide the Section confirmation that the above requirements are being fulfilled.*”

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Within 60-days of your receipt of this report, please develop a landfill gas monitoring plan and submit it for approval to:

Brian Wootton – Hydrogeologist
Division of Waste Management – SWS
Mail Service Center 1646
Raleigh, NC 27699-1646

Within 30-days of Mr. Wootton’s approval of the “Landfill Gas Monitoring Plan”, Gaston County must begin monitoring for landfill gas in accordance with approved plan.

The suggested outline for a “Landfill Gas Monitoring Plan”, is detailed in Section 8 of the enclosed “NCDENR Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance, November 2010”

ADDITIONAL COMMENTS

1. Buffer Requirements

NCGS 15A NCAC 13B .0503(2)(f) requires that “a site shall meet the following buffer requirements: (i) A 50-foot minimum buffer between all property lines and disposal areas.” The property lines and limits of waste have not been clearly delineated with permanent markers. While there are some edge-of-waste markers in place (2-inch PVC piping – Photos #1and #2), these markers do not appear to match up with the site maps provided by Buxton Environmental, Inc.

No property line markers were observed. Using the Gaston County GIS, the parcel property lines were overlaid on an approximation of the locations of the landfill limits of waste. (Figure 1) Given that Figure 1 suggests that the edge of waste is very near, if not over the property lines, and there is insufficient documentation available to show that the required buffers are being maintained, permanent waste boundary markers, along with property line markers are needed. These markers should clearly and accurately delineate the limits of waste and the property lines. (See the attached May 29, 2009 Memo: “*Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills*”)

Also, there is a small area of impounded water (Photo #5) located near or on the SE Fill Area. (Figure 1) As the limits of waste are not clearly defined, it is not possible to determine if this impounded water is over waste. Should it be determined that this impounded water is over waste, this would be a violation of “Post Closure Condition #2” of the July 24, 1996 closure letter. The closure conditions specified in the “Closure Letter” included, in part, the following operational requirements:

“The landfill unit shall be maintained such that surface water runoff occurs in a controlled manner, and surface water shall not be impounded over waste.”

At this time, given the lack of conclusive documentation, these issues are not considered to be violations of the North Carolina solid waste rules.

Within 60-days of your receipt of this report, please determine and mark the limits of waste of the landfill; and determine and mark the property lines of the landfill in accordance with the enclosed May 29, 2009 Memo (*Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills*)”.

Upon completion of the installation of the edge-of-waste and property line makers, please notify Bill Wagner the following address: NCDENR – Ashville Regional Office, 2090 US Hwy 70, Swannanoa, NC 28778.

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1. PVC “edge of waste” marker on the NW fill area.



2. PVC “edge of waste” marker on the NW fill area.



5. Looking south across the impounded water located near or on the SE Fill Area. (White clipboard in the foreground for scale.)



6. Looking SE along the eastern side of the SE fill area.

2. Eleven groundwater monitoring wells were located and inspected. Locational data (latitude and longitude) for each groundwater monitoring well was determined. (Table 1)

Well ID	Latitude (N)	Longitude (E)	Comment
MW-1	35.24577	-81.08834	Has well “tag”, but should be more clearly identified.
MW-2	35.24331	-81.08897	Needs new well tag & should be more clearly identified.
MW-2D	35.24333	-81.08899	Has well “tag”, but should be more clearly identified.
MW-3	35.24210	-81.08745	Has well “tag”, but should be more clearly identified.
MW-4	35.24373	-81.08736	Needs new well tag & should be more clearly identified.
MW-5	35.24184	-81.08711	Needs new well tag & should be more clearly identified.
MW-6	35.23992	-81.8615	Needs new well tag & should be more clearly identified.
MW-6D	35.23991	-81.08610	Good well tag.
MW-7	35.24104	-81.08397	Has well tag but no ID -needs new well tag. (Photo #3)
MW-7A	35.24095	-81.08385	Has well “tag” with wrong ID of “MW-9” (Photo #4)
MW-8	35.24157	-81.08458	Needs new well tag & should be more clearly identified.

Table 1: Groundwater Monitoring Well Locations & Condition

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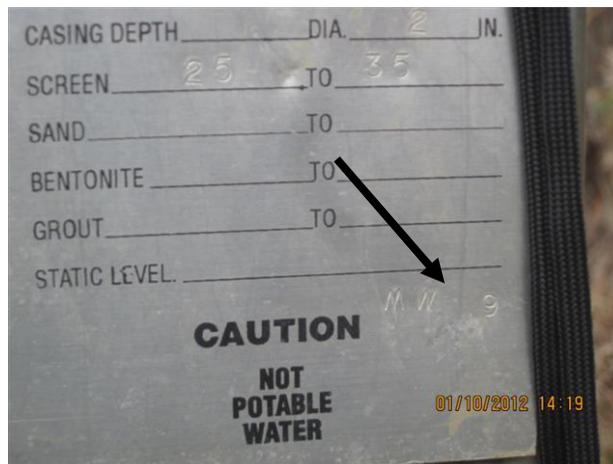
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3. Only one of the groundwater monitoring wells (MW-6D) is clearly marked with a unique ID. (Table 1) Please ensure that each groundwater monitoring well is clearly marked with a unique ID and that site maps are updated to show the correct locations and IDs of each groundwater monitoring well.



3. Illegible well tag – believed to be MW-7.



4. Mis-labeled well tag with “MW-9” ID – believed to actually be well MW-7A.

4. Water quality monitoring of ten groundwater monitoring wells (MW-1,2,2D,3,4,5,6,6D,7A, and MW-8) and two surface water locations (“upstream” and “downstream”) is conducted semi-annually.
5. **MW-7 is not being sampled for laboratory analysis. Within 30-days of your receipt of this report, please determine why MW-7 is no longer being sampled for water quality parameters and submit your findings to Bill Wagner at the address on page 4.**
6. Results of the analysis of water quality samples that were collected on May 17, 2011 were reviewed.
7. The cap of the landfill has a well established vegetative cover and is free of trees and woody vegetation. (Photo #6)
8. No seeps of leachate from the landfill, or excessive erosion of the cap was observed.
9. Access from Cramerton Road to the site is through a locked gate.
10. Proper landfill signage is displayed at the Cramerton Road access gate.
11. Uncontrolled access to the site can be made via the adjacent Cramerton Freewill Baptist Church property (NE of the landfill) and onto the Colonial Pipeline right-of-way.
12. The access road leading to the SE fill area was muddy but passable at the time of the inspection. Please ensure that all access roads are maintained and are passable at all times.
13. Annual landfill gas monitoring records were reviewed. The head-spaces in fourteen ground water monitoring wells were last monitored for the possible presence of methane in January 2011. According to the facilities records, each of the monitoring points are located at “least 100-ft. inside of the property line, without being on top of trash.”
14. Landfill gas monitoring is done annually by landfill staff.
15. A review of the State’s records did not find an approved landfill gas monitoring plan for the Cramerton Road Closed MSW landfill.
16. The annual landfill gas monitoring events have consisted of monitoring the head space of seven ground water monitoring wells (MW-1 through MW-7) along with ambient monitoring of seven locations (TS-1 through TS-7) that were at least 100-ft. inside of the property line without being over waste.
17. Historically, the site has been monitored annually for the possible presence of landfill gas. All results are reported in “% LEL for methane”.
18. At no time has a level of greater than 5% LEL for methane been detected at any sampling point.

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CLOSURE HISTORY:

In a review of the Solid Waste Section files, the following five documents relating to the closure of the Cramerton Sanitary Landfill (36-01) were found.

1. May 5, 1995 Letter from Janis McHargue – Solid Waste Section, to Warren Shindle –Gaston County.
RE: “*Clarification of the Regulatory Status of the Cramerton Landfill*”
Summary: The Cramerton Landfill appeared to have met the requirement for two feet of final soil cover; and pending the review of the groundwater monitoring plan and the subsurface conditions at the site; a “letter of closure” with post closure conditions addressing landfill gas monitoring in accordance with .0503(2)(a), post closure uses, surface and groundwater protection requirements, air quality requirements, and recordation requirements.
2. July 24, 1996 Letter from James Coffey – Solid Waste Section, to Warren Schindle [sic] – Gaston County
RE: “*Closure of Cramerton Landfill Permit # 36-01*”
Summary: Closure shall become effective upon written notification by Gaston County that the facility shall be maintained in compliance with the post closure conditions specified in the “Closure Letter” which states in-part: Management of landfill gas must meet the design standards in Rule .05023(2)(a); Management of surface water must meet the design standards in Rule .05023(2)(c); Surface water runoff must be controlled; Surface water shall not be impounded over waste; the integrity and effectiveness of the final cover system and any permanent erosion control devices must be maintained; Proposed post closure uses of the landfill must be reviewed and approved by the Section and such uses must not violate any post closure conditions; continuing solid waste management activities shall not violate any post closure conditions and must meet any other applicable requirements.
3. August 6, 1996 Letter from Warren Shindle – Gaston County, to James Coffey – Solid Waste Section
RE: “*Closure of the Cramerton Landfill, Permit #36-01*”
Summary: Written notification from Gaston County to the Section that the facility shall be maintained in compliance with the post closure conditions specified in the “Closure Letter” dated July 24, 1996.
4. November 8, 2001 Letter from Mark Poindexter – Solid Waste Section, to Ray Maxwell – Gaston County
RE: “*Phase I Site Assessment Report for the Gaston County, Auten Road, Biggerstaff and Cramerton [sic] Closed Sanitary Landfills (Permit # 36-03,36-02, and 36-01).*”
Summary: Well designations (i.e. well IDs) in the report text do not match well designations on site maps; Conflict between the disposal cell designations in the report text and site maps; quarterly landfill gas monitoring is required at all municipal solid waste sites; the Section shall be notified when the landfill gas monitoring system has been installed and is being monitored on a quarterly basis; site surface water sampling locations shall be permanently marked in the field to help ensure consistency in sample collection; and groundwater contamination was identified in MW-6D and MW-7A, requiring further delineation of the contaminate plume.
5. May 29, 2009 Memorandum from the Solid Waste Section to Owners and Operators of Construction & Demolition Landfills, Industrial Landfills, and Municipal Solid Waste Landfills, to Landfill Owners and Operators.
RE: “*Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills*”
Summary: Owners and operators of all active, inactive and closed C&D, Industrial and Municipal Solid Waste landfills must install and maintain permanent edge-of-waste markers for all landfill units; and Owners and operators of all active, inactive and closed C&D, Industrial and Municipal Solid Waste landfills must be able to show Division staff the permitted boundary of the facility.

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.

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



Bill Wagner

Environmental Senior Specialist
Regional Representative

Phone: 828-296-4705

Sent on: 2/15/12 to: Jan Winters – Gaston Co. Manager P.O. Box 1578 Gastonia, NC 28053		Email		Hand delivery		US Mail	X	Certified No. <u>7006 2150 0005 2458 9662</u>
Sent on: 2/15/12 to: Marcie Smith - Gaston Co. Solid Waste & Recycling Administrator		Email		Hand delivery		US Mail	X	Certified No. <u>7006 2150 0005 2458 9679</u>

Enc: May 5, 1995 Letter from Janis McHargue – Solid Waste Section: Regulatory Status “Cramerton Landfill; Solid Waste Permit #36-01”

July 24, 1996 Letter From James Coffey – Solid Waste Section: “Closure of the Cramerton Landfill”

November 8, 2001 Letter from Mark Poindexter – Solid Waste Section: “*Phase I Site Assessment Report for the Gaston County, Auten Road, Biggerstaff, and Crammerton [sic] Closed Sanitary Landfills (Permit #36-03, 36-02, and 36-01)*”

May 29, 2009 Solid Waste Section Memo: “*Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills*”

“NCDENR Division of Waste Management, Solid Waste Section, *Landfill Gas Monitoring Guidance*, November 2010”

ec: Jason Watkins, District Supervisor – Solid Waste Section
 Shawn McKee, Compliance Officer – Solid Waste Section
 Ray Maxwell, Gaston Co. Public Works Director, (rmaxwell@co.gaston.nc.us)
 Brian Wootton, Hydrogeologist – Solid Waste Section

c: Jan Winters, Gaston Co. Manager, P.O. Box 1578, Gastonia, NC 28053