

NORTH CAROLINA DIVISION OF AIR QUALITY			Region: Washington Regional Office County: Wayne NC Facility ID: 9600250 Inspector's Name: Mike Smithwick Date of Last Inspection: 11/10/2009 Compliance Code: 3 / Compliance - inspection
Air Permit Review - Renewal			
Permit Issue Date: XX, XX, 2010			
Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Wayne County Municipal Solid Waste Landfill			SIP: 15A NCAC 2Q .0513 NSPS: N/A NESHAP: N/A PSD: N/A PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: N/A
Facility Address: Wayne County Municipal Solid Waste Landfill 460B South Landfill Road Dudley, NC 28333			
SIC: 4953 / Refuse Systems NAICS: 562212 / Solid Waste Landfill			
Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 9600250.09A Date Received: 07/30/2009 Application Type: Renewal Application Schedule: TV-Renewal
Tim Rogers Solid Waste Manager 460B South Landfill Road Dudley, NC 28333 (919) 689-2994 Ext: 303 Tim.rogers@waynegov.com		Tim Rogers Solid Waste Manager 460B South Landfill Road Dudley, NC 28333 (919) 689-2994 Ext: 303 Tim.rogers@waynegov.com	Existing Permit Data Existing Permit Number: 08885T02 Existing Permit Issue Date: 10/10/2005 Existing Permit Expiration Date: 04/30/2010
Consultant: Carlson Environmental Consultants, PC Phone: (704) 506-7312 email: carlsonenv@gmail.com			
Review Engineer: Booker Pullen Regional Engineer: Mike Smithwick Review Engineer's Signature: _____ Begin Date: May 12, 2010		Comments / Recommendations: Issue: 08885T03 Permit Issue Date: XXXX, CXXX, 2010 Permit Expiration Date: XXX, XXXXX, 2015	

I. Introduction/Description:

The Wayne County Municipal Solid Waste Landfill, owns and operates a municipal solid waste (MSW) landfill located off of State Road 1129, near the town of Dudley, North Carolina. The application for this landfill (No. 9600250.009A) was received by the DAQ on July 30, 2009.

This landfill has three distinct areas of waste. Units 1 (ID No. ES-01) and Unit 2 (ID No. ES-02) are closed and Unit 3 is active. All three of these Units are controlled by a common gas collection and control system.

Wayne County has entered into a contractual agreement with MP Wayne, LLC (totally separate facility) to facilitate the usage of landfill gas as a source of green energy. Wayne County MSW Landfill has already installed a gas collection and control and treatment system (gccs). This gccs will remain on the Air Permit (08885) for the Wayne County Landfill. MP Wayne LLC will own and operate the gas-to-energy facility using the landfill gas as fuel to create electrical power that will be sold to Progress Energy.

II. Statement of Compliance

On the latest inspection of the facility, November 6, 2009 by Michael Smithwick of the Washington Regional Office, the facility indicated compliance with the Title V permit.

III.

Table of changes to existing permit No. 08885T02 per renewal application 9600250.09A:

Cover Letter of Permit			
Old Page No.	New Page No.	Condition Number	Changes
Page 1	Page 1	Heading and intro to cover letter	Changed date, revised permit number, revised “complete application” received date, added most current revision of cover letter, changed “responsible official”, added “renewal” in first sentence
Page 2	Page 2	Heading	Changed date on cover letter, changed effective date and issue date of the permit
Page 3	Page 3	Table	Updated the “Changes to Permit” table to reflect the renewal application 9600250.09A
Body of Permit			
Page 1	Page 1	Cover page of Permit	Changed: Permit No., “replaces Permit No. Revised: application No., complete application date, permit number, issue date, expiration date
N/A	Pages 3-13	Body of permit	Added the most current Title V language for all affected sources
All pages	All pages	Heading	Changed Permit No. to 08885T03
Pages 9-18	Pages 14-23	General Conditions	Added most current revision of General conditions

IV. Summary of Emission Sources and Control Devices

The following table identifies all emission sources and associated control devices for which this Title V Operating Permit is being issued

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-01, ES-02 NSPS, MACT	Non-active portions of landfill	CD-GCCS1	One landfill gas collection and control system (ID No. CD-GCCS1) including:
ES-03 NSPS, MACT	Active portion of landfill	CD-Treatment	One landfill gas treatment system
		CD-F1	One candle stick-type flare (30 million Btu per hour heat input capacity, ID No. CD-F1)

V. Emission Source-by-Source Evaluation

A. Municipal solid waste landfill (ID Nos. ES-01, ES-02, and ES-03) with associated gas collection and control system containing one candle stick-type flare (ID No. CD-F1)

- Description:** This facility receives municipal solid waste. The anaerobic decomposition of the buried waste produces landfill gas (LFG) which is collected and conveyed to one candle stick type flare (ID No. CD-F1) and/or the landfill gas treatment system. Blower units apply a vacuum to the landfill through a series of vertical and/or horizontal collection piping and route the landfill gas to a candlestick-type flare to be burned on site.
- Applicable Regulatory Requirements:** This municipal solid waste landfill (ID Nos. ES-01, ES-02, and ES-03) was modified after May 30, 1991, and is therefore subject to 40 CFR Part 60, Subpart WWW. The landfill has a design capacity (in-place waste plus additional permitted waste) greater than 2.5 million megagrams by mass (2.75 million tons) and 2.5 million cubic meters by volume and is therefore subject to Title V. Nonmethane organic compound (NMOC) emissions from the landfill are greater than 50 Mg per year, therefore the landfill is required by Subpart WWW to install and operate a gas collection and control system.

The candlestick-type flare (ID No. CD-F1) is **not** subject to any specific NSPS except that it must be designed in accordance with 40 CFR §60.18 “General Control Device Requirements”. This landfill is

also subject to the landfill MACT in accordance with 40 CFR Part 63, Subpart AAAA, because it is subject to Title V and is required to install and operate a gas collection and control system.

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Non methane organic compounds (NMOC)	Route landfill gas to a flare designed in accordance with 40 CFR §60.18 or treat gas in the gas treatment operation on site	15A NCAC 2D .0524 40 CFR Part 60, Subpart WWW
Sulfur dioxide (flare)	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions (flare)	20 percent opacity	15A NCAC 2D .0521
HAPs	Work practice standards and startup, shutdown, malfunction requirements	15A NCAC 2D .1111 40 CFR Part 63, Subpart AAAA
Odor	Suitable control equipment State Enforceable Only	15A NCAC 2D .1806
Toxic air pollutants	Facility wide toxics evaluation State Enforceable Only	15A NCAC 2Q .0705 (Last MACT, N. C. toxics evaluation)
		15A NCAC 2D .1100
Fugitive dust emissions	Suitable control	15A NCAC 2D .0540 (Included in General Conditions)

a. Applicable Regulatory Requirements:

This landfill and associated equipment are subject to the following regulations:

- 15A NCAC 2D .0524
- 15A NCAC 2Q .0705
- 15A NCAC 2D .1100
- 15A NCAC 2D .1806
- 15A NCAC 2D .1111
- 15A NCAC 2D .0540 (Included in the General Conditions)

* Removed regulation 15A NCAC 2D .0516 and 2D .0521 from the permit for the control devices (flares) per current guidance.

No regulatory review is required for the regulations listed above, because there have been no new sources added since this facility went through the last public notice. Compliance Assurance Monitoring (CAM) does not apply because these sources are regulated by both an NSPS and MACT that were promulgated after 1990 and control the pollutants that would be subject to the CAM.

- b.** Since the last permit modification and/or renewal for this facility, the regulatory language included in Title V permits for Municipal Solid Waste Landfills has been revised to place more of the NSPS requirements into the body of the permit. This new revised language will be placed into this permit along with the revised General Conditions (Revision 3.1).

- VI.** A Professional Engineers Seal **is not** required for this renewal application because there are no new sources being added.
- VII.** A zoning consistency determination **is not** required for this renewal application.
- VIII.** An application fee **is not** required for this renewal application.
- IX.** The appropriate number of copies of the application was received by the DAQ Raleigh Central Office on July 30, 2009.

- X.** The application was signed by the Solid Waste Director for the Wayne County Solid Waste Landfill. The Solid Waste Director does not fit the definition of an authorized official as defined by 15A NCAC 2Q .0304(j) for a facility owned by a municipality. A certified letter dated January 19, 2010 was mailed to the facility requesting the signature or an appropriate responsible official. The appropriate signatures were submitted to the Division of Air Quality on _____2010.
- XI.** **PSD does not apply** for this renewal.
- XII.** **Public Notice**
A thirty-day public notice and EPA review period **is required.**
- Public notice:** The 30 day public notice period was from _____ through _____. ____ public comments were received for this permit application.
- EPA 45-Day review Period:** The DAQ sent copies of the appropriate information to the USEPA on _____. The EPA 45-day review period was from _____through _____. The USEPA _____ comments on the renewal permit for this facility.
- XIII.** This facility **is not** subject to 15A NCAC 2Q .0508(g) "Prevention of Accidental Releases" because it does not store any of the listed 112(r) chemicals in quantities above the thresholds.
- XIV.** **Ozone Nonattainment:**
Wayne County is designated as attainment for the 8-hour ozone standard. Nonattainment does not apply.

XVI. Recommendations:

The Washington Regional Office (WaRO) submitted a regional review of the initial application to the Raleigh Central Office on September 16, 2009. A copy of the review and the draft permit were sent to the WaRO on May 14, 2010. A copy of the draft permit was sent to the applicant on **May _ 2009**.

This permit, issued as a “Renewal” of a Title V permit for the Wayne County Municipal Solid Waste Landfill, located in Dudley, North Carolina, has been reviewed by the DAQ to determine compliance with all requirements. The Washington Regional Office concurs with the issuance of this permit.

Issue permit No. 08885T03.