



State Registration Number  
N3294

Michigan Department of Environmental Quality  
Air Quality Division  
**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N3294-2008

Ottawa County Farms Landfill

And

Ottawa Generating Station

SRN: N3294

Located at

15550 68th Avenue, Coopersville, Michigan 49404

Permit Number: MI-ROP-N3294-2008

Staff Report Date: December 24, 2007

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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ROP Number

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**December 24, 2007 STAFF REPORT**

**Purpose**

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

**General Information**

Section 1 Mailing Address:	Ottawa County Landfill Inc. 250 64 <sup>th</sup> Avenue Coopersville, Michigan 49404
Section 2 Mailing Address:	Granger Electric Company 16980 Wood Road P.O. Box 27185 Lansing, Michigan 48909
Source Registration Number (SRN):	N3294
Standard Industrial Classification (SIC) Code:	4953
Number of Stationary Source Sections:	2
Application Number:	200600135
Is Application for a Renewal or Initial Issuance?	Renewal
Responsible Official Section 1:	Thomas Evenhouse, District Manager 616-379-0555
Responsible Official Section 2:	Marc Pauley, Director of Operations 517-372-8330
AQD Contact:	David Morgan, Environmental Quality Analyst 616-356-0009
Date Permit Application Submitted:	September 20, 2006
Date Application Was Administratively Complete:	October 5, 2006
Is Application Shield In Effect?:	Yes
Date Public Comment Begins:	December 24, 2007
Deadline for Public Comment:	January 23, 2008

**Source Description**

The Ottawa County Farms Landfill commenced operation in 1982 as a Type II (non-hazardous) solid waste disposal facility located on 246.13 acres in Sections 26 and 27, Polkton Township, Ottawa County. The solid waste boundaries contain 191.02 acres of disposal area. Approximately 30 acres have been certified closed and an additional 30 acres have reached final grades. The stationary source consists of the active municipal solid waste (MSW) landfill including an active landfill gas collection system. OCFL has a design capacity greater than 2.5 million cubic meters at 13 million cubic meters and has a non-methane organic compound (NMOC) emission rate greater than 50 megagrams per year. Landfill gas generated at the site is either treated and burned off-site or the gas is burned in an open flare with a gas flow capacity of 3,000 standard cubic feet per minute. The gas is directed to Ottawa Generating Station where internal combustion engines generate electricity. Excess gas is flared and processed for use by Resource Recovery Corporation (RCC) to recover metals and sands from used foundry sand.

In December 1995 OCFL became subject to the New Source Performance Standard (NSPS) for Municipal Solid Waste Landfills under 40 CFR Part 60, Subpart WWW because the facility design capacity was expanded to above 2.5 million cubic meters.

The Ottawa Generating Station, owned and operated by the Granger Electric Company, is covered under Section 2 of the ROP and consists of two landfill gas treatment systems and seven internal combustion engines used to generate electricity for sale. All engines operate 24 hours per day, 7 days per week. Six of the internal combustion engines are exempt from permitting under Rule 285(g). The seventh engine was installed under Permit to Install (PTI) No. 173-05. Landfill gas from OCFL is piped through two landfill gas treatment systems where the gas is filtered, dewatered, compressed, and cooled. There are no atmospheric vents or emissions from the landfill gas treatment systems; any gas not burned in the engines is routed to an open flare. The open flare is exempt from permitting under Rule 285(aa). In addition, there are no specific requirements in the ROP because the open flare is burning gas that has been conditioned in the treatment systems.

Resource Recovery Company (RRC) owns and operates a foundry sand recovery business on OCFL property. RRC's operation uses landfill gas to heat foundry sand and recover metals from the sand. This operation is authorized and covered by Permit to Install No.11-96. In accordance with Operation Memorandum No. 11, RRC is considered a separate stationary source for purposes of this ROP because RRC does not share the same 2-digit primary Standard Industrial Classification (SIC) as OCFL, the OCFL does not have any operational control over the operations at RRC.

The following table lists stationary source emission information as reported in Michigan Air Emissions Reporting System for **2006** submittal.

**TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	223
Nitrogen Oxides (NO <sub>x</sub> )	114
Particulate Matter (PM10)	29
Sulfur Dioxide (SO <sub>2</sub> )	5.6
Volatile Organic Compounds (VOCs)	65
Non-methane Organic Compounds (NMOC)	25

\*\*As listed pursuant to Section 112(b) of the Clean Air Act.

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See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

**Regulatory Analysis**

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are addressed in the non-applicable requirement part of the Staff Report and Part E of the ROP.

The stationary source is located in Ottawa County, which is currently designated as attainment/unclassified for all criteria pollutants.

The stationary source is not subject to R 336.1220 for Major Offset Sources.

The stationary source is subject to 40 CFR Part 70 because it is subject to 40 CFR Part 60, Subpart WWW which requires the stationary source to obtain a Renewable Operating Permit.

The stationary source is subject to Prevention of Significant Deterioration (PSD) (40 CFR 52.21) regulations because the stationary source has the potential to emit of carbon monoxide greater than 250 tons.

The stationary source is not considered a major source of Hazardous Air Pollutant (HAP) emissions because the potential to emit of any single HAP regulated by the Clean Air Act, Section 112 is less than 10 tons per year and the potential to emit of all HAP combined are less than 25 tons per year.

The stationary source is subject to the New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills promulgated in 40 CFR Part 60 Subparts A and WWW.

The stationary source is also subject to the Maximum Achievable Control Technology Standard (MACT) for Municipal Solid Waste Landfills promulgated in 40 CFR Part 63, Subparts A and AAAA.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the DEQ's "Procedure for Evaluating Periodic Monitoring Submittals."

The stationary source is not subject to the federal Compliance Assurance Monitoring (CAM) rule under Title 40 of the Code of Federal Regulations, Part 64, because the emission limitation(s) or standard(s) for municipal solid waste landfills are covered by 40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart AAAA. Thus, EULANDFILL is exempt from CAM requirements.

Please refer to Parts B, C and D in the enclosed draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

**Source-Wide Permit to Install (PTI)**

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document. PTIs that are being incorporated through this current permit action into the Source-Wide PTI are listed in Appendix 6 of the permit.

The following table lists all individual PTIs that were incorporated into previous ROP/Source-Wide PTIs and subsequently voided.

PTI Number			
NA	NA	NA	NA

**Equivalent Requirements**

This permit does not include any equivalent requirements or significant changes pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original New Source Review permit, a Consent Order/Judgment, and/or the State Implementation Plan.

**Non-applicable Requirements**

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

**Processes in Application Not Identified in Draft RO Permit**

The following table lists processes that were included in the ROP application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt Emission Unit ID	Description of Exempt Emission Unit	ROP Exemption	NSR Permit Exemption
EU-ENGINES	Six internal combustion engines are low emission landfill gas engines that fire lean fuel mixtures. The engine has a power rating of 1,138 horsepower and a maximum operating fuel requirement of approximately 8.6 million BTU per hour.	R 336.1212(4)(d)	R 336.1285(g)
EU-USED OIL-GR	Two 1,000-gallon and two 500-gallon used oil tanks inside treatment system buildings.	R 336.1212(4)(c)	R 336.1284(i)
EU-PROPANE-GR	Two 500-gallon propane tanks located outside treatment system buildings.	R 336.1212(4)(c)	R 336.1284(b)

**Draft ROP Terms/Conditions Not Agreed to by Applicant**

This permit does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

**Action Taken by the Department**

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Heidi G. Hollenbach, Grand Rapids District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.



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**January 24, 2008 STAFF REPORT  
ADDENDUM**

**Purpose**

A Staff Report dated December 24, 2007, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

Responsible Official Section 1:	Thomas Evenhouse, District Manager 616-379-0555
Responsible Official Section 2:	Marc Pauley, Director of Operations 517-372-8330
AQD Contact:	David Morgan, Environmental Quality Analyst 616-356-0009

**Summary of Pertinent Comments**

No pertinent comments were received during the 30-day public comment period.

**Changes to the December 24, 2007 Draft ROP**

No changes were made to the draft ROP.