

Michigan Department of Natural Resources & Environment
Air Quality Division

State Registration Number
B2838

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B2838-2011

Veolia Energy Grand Rapids, LLC

SRN: B2838

Located at

156 West Fulton Avenue SW, Grand Rapids, Kent County, Michigan 49503

Permit Number: MI-ROP-B2838-2011

Staff Report Date: December 6, 2010

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 Natural Resources and Environment (MDNRE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

TABLE OF CONTENTS

| | |
|--|----------|
| December 6, 2010 STAFF REPORT | 3 |
| January 6, 2011 STAFF REPORT ADDENDUM | 7 |

Michigan Department of Natural Resources & Environment
Air Quality Division

State Registration Number
B2838

RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-B2838-2011

December 6, 2010 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

| | |
|---|---|
| Stationary Source Mailing Address: | Veolia Energy Grand Rapids, LLC 50 Monroe Avenue NW, Suite 430 Grand Rapids, Michigan 49503 |
| Source Registration Number (SRN): | B2838 |
| North American Industry Classification System (NAICS) Code: | 221330 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 201000087 |
| Responsible Official: | F. Keith Oldewurtel, Vice President and General Manager 616-356-2535 |
| AQD Contact: | Stephen J. Lachance, Environmental Quality Specialist 616-356-0239 |
| Date Permit Application Received: | September 20, 2010 |
| Date Application Was Administratively Complete: | October 1, 2010 |
| Is Application Shield In Effect? | Yes |
| Date Public Comment Begins: | December 6, 2010 |
| Deadline for Public Comment: | January 5, 2011 |

Source Description

The facility provides steam to meet the heating and cooling demands of a defined district/portion of downtown Grand Rapids. Steam is produced by four oil/gas-fired boilers. Three of the boilers are each designed to generate up to 100,000 pounds per hour of steam with a maximum heat input of 120 million Btu per hour. The fourth boiler is designed to generate up to 150,000 pounds per hour of steam with a maximum heat input of 180 million Btu per hour.

Operations began at this downtown Grand Rapids location in 1888 as the Grand Rapids Edison Light and Fuel Company. In the 1920's, Consumers Power Company rebuilt this source into a coal-fired steam plant with a back pressure turbine/generator. In 1964, Consumers Power Company installed three larger capacity boilers in December and replaced the fourth boiler in November, 1969. These new (current) boilers could burn either natural gas or fuel oil. Kent County became the owner of the system in 1986. Veolia Energy Grand Rapids, LLC acquired the facility in late 2008.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the 2010 submittal.

TOTAL STATIONARY SOURCE EMISSIONS

| Pollutant | Tons per Year |
|---------------------------------------|----------------------|
| Carbon Monoxide (CO) | 38 |
| Lead (Pb) | 0 |
| Nitrogen Oxides (NO _x) | 71 |
| Particulate Matter (PM) | 3 |
| Sulfur Dioxide (SO ₂) | 0 |
| Volatile Organic Compounds (VOCs) | 2 |
| Total Hazardous Air Pollutants (HAPs) | <10 |

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

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 explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Kent County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because the potential to emit carbon monoxide, sulfur dioxide and nitrogen oxides exceeds 100 tons per year.

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 federal Clean Air Act, Section 112 is less than 10 tons per year and the potential to emit of all HAPs combined is less than 25 tons per year. As such, the stationary source equipment is not currently subject to the Maximum Achievable Control Technology (MACT) Standards promulgated in Title 40 of the Code of Federal Regulations, Part 63.

No emission units at the stationary source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451 or 40 CFR, Part 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations. Modifications of the process equipment at this stationary source may be subject to the PSD requirements for attainment pollutants.

The stationary source is not subject to any New Source Performance Standards (NSPS). The most recent permitting action enabling additional fuel flexibility was not considered to be a modification subject to NSPS, since the equipment had the existing ability to burn the fuel oil in question and there was no net increase in emissions due to the permitted change.

The most recent physical change at the plant, completed in 2009, was the installation of an economizer (heat recovery) unit and associated stack. These serve all four units. This work was exempt from permitting per Rule 285(b). The new stack meets the permitted stack requirements for the existing stacks.

While natural gas is the primary fuel fired, the facility also has the capability to burn fuel oil in Units 1-3. There is a 150,000-gallon tank located immediately south of the plant. This storage tank is exempt from a permit-to-install pursuant to Rule 336.1284(d).

The stationary source is not subject to Acid Rain permitting (40 CFR 72), the NOx Budget Trading program pursuant to Rules 802 through 816, or Rule 801.

No emission units are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

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

Please refer to Parts B, C and D in the 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.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-B2838-2006 are identified in Appendix 6 of the ROP.

| PTI Number | | | |
|------------|---------|---------|--------|
| 115-83 | 115-83A | 115-83B | 255-05 |

Equivalent Requirements

This permit does not include any equivalent requirements pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original PTI, 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 ROP

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 | PTI Permit Exemption |
|--------------------------------|---|----------------------|-----------------------------|
| EU-GASSTORAGE | 25 gallon container for on-site gasoline use. | R 336.1212(4)(c) | R 336.1284(g)(i) |
| EU-SPACEHEATER | Small, oil-fired space heater. | R 336.1212(4)(b) | R 336.1282(b)(i) |

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 DNRE

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.

RENEWABLE OPERATING PERMIT

January 6, 2011 STAFF REPORT ADDENDUM

Purpose

A Staff Report dated December 6, 2010, 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: | F. Keith Oldewurtel, Vice President and General Manager 616-356-2535 |
| AQD Contact: | Stephen J. Lachance, Environmental Quality Specialist 616-356-0239 |

Summary of Pertinent Comments

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

Changes to the Draft ROP

No changes were made to the draft ROP.