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|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B7536 | **STAFF REPORT** | MI-ROP-B7536-2019 |

**Hillsdale Board of Public Utilities**

State Registration Number (SRN): B7536

Located at

201 Waterworks Avenue, Hillsdale, Hillsdale County, Michigan 49242

Permit Number: MI-ROP-B7536-2019

Staff Report Date: May 13, 2019

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) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), 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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| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
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**Purpose**

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan’s Administrative Rules for Air Pollution Control promulgated under 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 Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP 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: | Hillsdale Board of Public Utilities201 Waterworks AvenueHillsdale, Michigan 49242  |
| Source Registration Number (SRN): | B7536 |
| North American Industry Classification System (NAICS) Code: | 221112 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 201900011 |
| Responsible Official: | Chris McArthur, Director517-437-3387 |
| AQD Contact: | Brian Carley, Environmental Quality Specialist517-416-4631 |
| Date Application Received: | January 24, 2019 |
| Date Application Was Administratively Complete: | January 24, 2019 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | May 13, 2019 |
| Deadline for Public Comment: | June 12, 2019 |

**Source Description**

The City of Hillsdale, Board of Public Utilities has an electrical peaking unit with two diesel engines located at 201 Waterworks Avenue. The plant is used during peak energy use to supply energy for the power grid and has been in operation since 1948. The electrical power is generated from two diesel engines that have an output of 5,613 KW and 6,000 KW. They use No. 2 fuel oil and natural gas to run these engines. They are located near the northeast end of Baw Beese Lake and they use cooling tower to cool the engines. The facility is in a flat rural area with the nearest resident being more than 1000 feet away to the south of the plant.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 0 |
| Lead (Pb) | 0 |
| Nitrogen Oxides (NOx) | 10.6 |
| Particulate Matter (PM) | 0 |
| Sulfur Dioxide (SO2) | 0 |
| Volatile Organic Compounds (VOCs) | 0 |
| Ammonia | 0 |

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2018 by AQD:

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\***  | **Tons per Year** |
| Benzene | **0** |
| Ethylbenzene | **0** |
| Formaldehyde | **0** |
| Naphthalene | **0** |
| Toluene | **0** |
| Xylenes Isomers | **0** |
| **Total Hazardous Air Pollutants (HAPs)** | **0** |

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

See Parts C and D in the 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 in Hillsdale County, which is currently designated by the United States 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 of nitrogen oxides exceeds 100 tons per year.

No emission units at the stationary source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of The Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

Although EU-ENG-5 and EU-ENG-6 were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

Since the effective date of ROP No. MI-ROP-B7536-2014, EU-ENG-2, EU-ENG-3, and EU-ENG-4 have been disconnected and will no longer be included in the ROP.

EU-ENG-5 and EU-ENG-6 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

EU-ENG-5 and EU-ENG-6 at the stationary source are subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ (RICE Area Source MACT). The ROP contains special conditions provided by Hillsdale Board of Public Utilities in their application for applicable requirements from 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not delegated the regulatory authority for this area source MACT.

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."

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 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 control devices (catalytic silencers) that are installed on the engines were required by the RICE Area Source MACT to comply with a RICE Area Source MACT emission limit.

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-B7536-2014 are identified in Appendix 6 of the ROP.

| **PTI Number** |
| --- |
| 198-99 | 144-76 |  60-06 |   |

**Streamlined/Subsumed Requirements**

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

**Non-applicable Requirements**

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

| **PTI Exempt****Emission Unit ID** | **Description of PTI****Exempt Emission Unit** | **Rule 212(4)****Citation** | **PTI Exemption Rule Citation** |
| --- | --- | --- | --- |
| EU-BLR-002 | Natural gas steam boiler for plant heat rated at a maximum of 2,049,000 Btu/hr | R 336.1212(4)(c) | R 336.1282(2)(b)(i) |
| EU-ENG-001 | 20 HP diesel engine for backup air compressor | R 336.1212(4)(c) | R 336.1282(2)(b)(ii) |
| EU-UH-1-7 | Seven natural gas fired heaters each rated at a maximum of 75,000 Btu/hr | R 336.1212(4)(c) | R 336.1282(2)(b)(i) |

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

This draft ROP 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 EGLE, AQD**

The AQD proposes to approve this ROP. 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 USEPA is allowed up to 45 days to review the draft ROP 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 Scott Miller, Jackson District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP 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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**Purpose**

A Staff Report dated May 13, 2019, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. 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 Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

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| --- | --- |
| Responsible Official: | Chris McArthur, Director517-437-3387 |
| AQD Contact: | Brian Carley, Environmental Quality Specialist517-416-4631 |

**Summary of Pertinent Comments**

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

**Changes to the May 13, 2019 Draft ROP**

No changes were made to the draft ROP.