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|  | Michigan Department of Environmental Quality  Air Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B7287 | **STAFF REPORT** | MI-ROP-B7287-2019 |

**Sturgis Municipal Power Plant**

State Registration Number (SRN): B7287

Located at

505 West Chicago Road, Sturgis, St. Joseph County, Michigan 49091

Permit Number: MI-ROP-B7287-2019

Staff Report Date: January 7, 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 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).

**TABLE OF CONTENTS**

January 7, 2019 STAFF REPORT 3

February 12, 2019 - STAFF REPORT ADDENDUM 7

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental Quality  Air Quality Division |  |
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| B7287 | January 7, 2019 STAFF REPORT | MI-ROP-B7287-2019 |

**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: | Sturgis Municipal Power Plant  130 North Nottawa Street  Sturgis, Michigan 49091 |
| Source Registration Number (SRN): | B7287 |
| North American Industry Classification System (NAICS) Code: | 221122 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? |  |
| Application Number: | 201800123 |
| Responsible Official: | Josh Czajkowski, Electrical Operations Manager  269-659-7287 |
| AQD Contact: | Dennis Dunlap, Environmental Quality Specialist  269-567-3553 |
| Date Application Received: | October 3, 2018 |
| Date Application Was Administratively Complete: | October 3, 2018 |
| Is Application Shield in Effect? |  |
| Date Public Comment Begins: | January 7, 2019 |
| Deadline for Public Comment: | February 6, 2019 |

**Source Description**

Sturgis Municipal Power Plant (Facility) is a municipal electric power generation plant. Dual fuel engine generator No. 6 was installed in 1981 and is capable of burning No. 2 fuel oil and natural gas. This unit was permitted at 249 tons per year NOx. The Facility also has a 30,000-gallon aboveground fuel oil storage tank and cold cleaners used for cleanup activities. The Facility is located in downtown Sturgis near businesses and residential areas.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System for the year 2017.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 0.06 |
| Nitrogen Oxides (NOx) | 1.81 |
| Particulate Matter (PM) | 0.08 |
| Sulfur Dioxide (SO2) | 0 |
| Volatile Organic Compounds (VOC) | 0.18 |

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 St. Joseph 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 NOx exceeds 100 tons per year. The Facility is considered a minor source of Hazardous Air Pollutant (HAP) 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 all HAPs combined is less than 25 tons per year.

The stationary source is considered a “synthetic minor” source in regards to the Prevention of Significant Deterioration regulations of 40 CFR Part 52.21, because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of NOx to less than 250 tons per year.

EU-ENG-6 is not subject to the acid rain requirements, according to 40 CFR Part 72.6(b)(2), as it was in operation prior to November 15, 1990, and it serves a generator with a nameplate capacity less than 25 megawatts.

EU-OIL-TANK at the stationary source is subject to the New Source Performance Standards for Volatile Organic Liquid Storage Vessels promulgated in 40 CFR Part 60, Subparts A and Kb.

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

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."

The emission limitation or standard for carbon monoxide at the stationary source with the underlying applicable requirement of National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subpart ZZZZ, from EU-ENG-6 is exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR Part 64.2(b)(1)(i), because the CO emission limit meets the CAM exemption for new source performance standards or maximum achievable control technology proposed after November 15, 1990.

The NOx emission limit in EU-ENG-6 is not subject to the federal CAM regulation rule because there is not a control device for NOx.

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-B7287-20XX are identified in Appendix 6 of the ROP.

| **PTI Number** | | | |
| --- | --- | --- | --- |
| 434-80 |  |  |  |

**Streamlined/Subsumed Requirements**

The following table lists explanations of any streamlined/subsumed requirements included in the ROP pursuant to Rules 213(2) and 213(6). All subsumed requirements are enforceable under the streamlined requirement that subsumes them.

| **Emission Unit/Flexible Group ID** | **Condition Number** | **Streamlined Limit/ Requirement** | **Subsumed Limit/ Requirement** | **Stringency Analysis** |
| --- | --- | --- | --- | --- |
| EU-ENG-6 | II.1 | 0.5% sulfur in fuel, R 336.1201(3) | 1.5% sulfur by weight in fuel,  R 336.1401(1) | The streamlined limit of 0.5% sulfur in fuel is more stringent than the subsumed limit of 1.5% sulfur in fuel. |

**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-HEATERS | Three (3) natural gas radiant heaters; 200,000 Btu/hr each | 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 MDEQ, 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 Mr. Rex Lane, Kalamazoo 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 January 7, 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  comment period as described in . In addition, this addendum describes any changes to the  ROP resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | Josh Czajkowski, Electrical Operations Manager  269-659-7287 |
| AQD Contact: | Matt Deskins, Environmental Quality Analyst  269-567-3542 |

**Summary of Pertinent Comments**

No pertinent comments were received during the comment period.

**Changes to the January 7, 2019 ROP**

No changes were made to the ROP.