|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | **STAFF REPORT** | MI-ROP-B2796-2015c |

**DTE Electric Company**

**St. Clair/Belle River Power Plant**

SRN: B2796

Located at

4901 Pointe Drive, St. Clair, St. Clair County, Michigan 48054

Permit Number: MI-ROP-B2796-2015c

Staff Report Date: March 9, 2015

Amended Dates: November 4, 2015,

March 7, 2016

July 15, 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).

**TABLE OF CONTENTS**

March 9, 2015 - STAFF REPORT 3

May 21, 2015 - STAFF REPORT ADDENDUM 11

November 4, 2015 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION 16

November 4, 2015 - STAFF REPORT FOR RULE 216(1)(a)(i)‑(iv) ADMINISTRATIVE AMENDMENT 18

December 15, 2015 - STAFF REPORT ADDENDUM FOR RULE 216(2) MINOR MODIFICATION 19

March 7, 2016 - STAFF REPORT FOR RULE 217(2) REOPENING 20

April 26, 2016 - STAFF REPORT ADDENDUM FOR RULE 217(2) REOPENING 22

June 16, 2016 - STAFF REPORT ADDENDUM FOR RULE 217(2) REOPENING 23

July 15, 2019 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT 24

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | March 9, 2015 - STAFF REPORT | M!-ROP-B2796-2015 |

**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: | DTE Electric CompanySt. Clair/Belle River Power Plant4901 Pointe DriveSt. Clair, Michigan 48054  |
| Source Registration Number (SRN): | B2796 |
| North American Industry Classification System (NAICS) Code: | 221112 |
| Number of Stationary Source Sections: | 7 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 201300200 |
| Responsible Official: | 1. Mr. Justin L. Morren Plant Manager, Fossil Generation  Section 1, St. Clair Power Plant 810-326-6201, 2. Mr. Nader Rajabian Plant Manager, Fossil Generation  Section 2, St. Clair - Diesel Generator - Peakers Section 4, Belle River Peakers 313-897-14923. Mr. Timothy G. Kerry Plant Manager, Fossil Generation  Section 3, Belle River Power Plant 810-326-31994. Mr. Stephen Sorrentino VP, Wholesale Power and Renewables Section 5, DTE East China, LLC 734-302-48935. Ms. Katherine Panczak Vice President, Reduced Emissions Fuel Section 6, Belle River Fuels Company, LLC Section 7, St. Clair Fuels Company, LLC 734-302-8235 |
| AQD Contact: | Francisco S. Lim, Sr. Environmental Engineer586-753-3742 |
| Date Permit Application Received: | December 10, 2013 |
| Date Application Was Administratively Complete: | December 10, 2013 |
| Is Application Shield In Effect? | Yes |
| Date Public Comment Begins: | March 9, 2015 |
| Deadline for Public Comment: | April 8, 2015 |

**Source Description**

The DTE Electric Company St. Clair/Belle River Power Plant is an electric generating facility composed of the St. Clair Power Plant located at 4901 Pointe Drive, St. Clair, and Belle River Power Plant located at 4505 King Road, China Township, St. Clair County. Included in this electric generating facility are the St. Clair Peaking Units, Belle River Peaking Units, DTE East China Peaking Units, Belle River Fuels Company, and St. Clair Fuels Company. St. Clair Power Plant has been in operation since the mid-1950's while Belle River Power Plant has been operational since 1984. The power plants, including the peaking units and the reduced emissions fuel processing plants are considered a single stationary source based on the definition found in Michigan Administrative Rule 119(r).

The St. Clair Power Plant, identified in Section 1 of the ROP, has six electric generating units with a total maximum gross design generating output of 1,375 megawatt (MW). The Belle River Power Plant, Section 3, has two electric generating units, each with a maximum gross design generating output of 697 MW. Pulverized coal is the primary fuel for all boilers in both power plants. The St. Clair boilers can also be fired with fuel oil no. 6, fuel oil no. 2, off-specification recycled used oil, and biodiesel (Boiler 7 only).

The St. Clair Peaking Units, identified in Section 2 of the ROP, consist of a 23 MW combustion turbine electric generator and (2) 2.75 MW each diesel electric generators; the Belle River Peaking Units, Section 4, consist of (5) 2.5 MW each diesel electric generators and (3) 82.4 MW each combustion turbine electric generators; and the DTE East China Peaking Units, Section 5, consist of (4) 82.4 MW each combustion turbine electric generators. The reduced emissions fuel processing plants, Sections 6 and 7 adds material to the coal to reduce mercury and acid gases.

Particulate emissions from the power plants are controlled through the use of electrostatic precipitators and baghouses. Nitrogen oxides are controlled by installing low-NOx burners in the boilers and combustion turbines. The power plants installed Continuous Emissions Monitoring Systems to measure gas flow, sulfur dioxide, carbon dioxide, nitrogen oxides and opacity.

Other emission sources at the power plants include auxiliary boilers, flyash handling systems, coal handling systems, a railcar coal dumping facility, and cold parts cleaners.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2013** submittal.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 2,065 |
| Lead (Pb) | 0.1 |
| Nitrogen Oxides (NOx) | 17,776 |
| Particulate Matter (PM) | 45 |
| Sulfur Dioxide (SO2) | 54,898 |
| Volatile Organic Compounds (VOCs) | 7 |
| **Individual Hazardous Air Pollutants (HAPs) \*\*** |  |
| Acetaldehyde | 0.2 |
| Acrolein | 0.1 |
| Benzene | 0.3 |
| Formaldehyde | 0.2 |
| HCl | 543 |
| HF | 153 |
| Mercury | 0.3 |
| MEK | 0.2 |
| Nickel | 0.1 |
| Propionaldehyde | 0.1 |
| Selenium | 0.7 |
| Toluene | 0.1 |
| **Total Hazardous Air Pollutants (HAPs)** | **698.3** |

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

In addition to the pollutants listed above that have been reported in MAERS, the potential to emit of Greenhouse Gases in tons per year of CO2e is more than 100,000. CO2e is a calculation of the combined global warming potentials of six Greenhouse Gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

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.

This DTE Electric Company stationary source is engaged in the generation of electricity for sale. It is located in St. Clair County, which is currently designated by the U.S. Environmental Protection Agency

as attainment 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 all criteria pollutants exceeds 100 tons per year; the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than10 tons per year and/or the potential to emit of all HAPs combined is more than 25 tons per year; and the potential to emit of Greenhouse Gases is 100,000 tons per year or more calculated as carbon dioxide equivalents (CO2e) and 100 tons per year or more on a mass basis.

The stationary source is subject to Prevention of Significant Deterioration (PSD) regulations, 40 CFR 52.21 because the stationary source has the potential to emit criteria pollutants greater than 250 tons per year as described below.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER1-BR, EU-BOILER2-BR were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR, PART 52.21, because at the time of New Source Review permitting the potential to emit of carbon monoxide was greater than the significance level of 100 tons per year.

EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP EU-CTG01-DP, EU-CTG-02-DP, EU-CTG03-DP, and EU-CTG04-DP were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR, PART 52.21, because at the time of New Source Review permitting the potential to emit of carbon monoxide was greater than the significance level of 100 tons per year; potential to emit nitrogen oxides were greater than the significance level of 40 tons per year; and the potential to emit PM-10 is greater than the significance level of 15 tons per year..

At this time, there are no GHG applicable requirements to include in the ROP. The mandatory Greenhouse Gas Reporting Rule under 40 CFR Part 98 is not an ROP applicable requirement and is not included in the ROP.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC were installed prior to August 15, 1967. As a result, the boilers are considered "grandfathered” with regards to using off-specification used oil and are not subject to New Source Review (NSR) permitting requirements. However, future modifications of this equipment may be subject to NSR permitting requirements.

Although EU-PARTSCLN-SC, EU-FIREPUMP-SC, EU-FULTON-SC EU-BURNHAM-SC, EU-PARTSCLN-BR, and EU-FIREPUMP-BR 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.

EU-BOILER1-BR and EU-BOILER2-BR at the stationary source are subject to the Standards of Performance for Fossil-Fuel-Fired Steam Generators promulgated in 40 CFR, Part 60, Subparts A and D.

EU-NAUXBLR-BR and EU-SAUXBLR-BR at the stationary source are subject to the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR, Part 60, Subparts A and Db.

EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Standards of Performance for Stationary Gas Turbines promulgated in 40 CFR, Part 60, Subparts A and Db.

EU-FIREPUMP-SC, EU-DG12-1-SP, EU-DG12-2-SP, EU-FIREPUMP-BR, EU-DG11-1-BP, EU-DG11-2-BP, EU-DG11-3-BP, EU-DG11-4-BP, and EU-DG11-5-BP at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and GG.

EU-FULTON-SC, EU-BURNHAM-SC, EU-NAUXBLR-BR, and EU-SAUXBLR-BR at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR, Part 63, Subparts A and DDDDD.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Coal-and-Oil-Fired Electric Utility Steam Generating Units promulgated in 40 CFR, Part 63, Subparts A and UUUUU. Part 15 of Michigan Air Pollution Control Rules, adopted pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), addresses new requirements pertaining to mercury in the State of Michigan. These rules were intended to limit mercury emissions from electric generation units as of January 1, 2015. Rule 1502a, however, recognizes that the Part 15 permitting requirements defer to 40 CFR Part 63, Subpart UUUUU.

EU-PREREFEED-BRFC, EU-REF-BRFC, EU-REFCOAL-BRFC, EU-PREREFEED-SCFC, EU-REF-SCFC, and EU-REFCOAL-SCFC are subject to New Source Performance Standards for Coal Preparation and Processing Plants, 40 CFR Subpart Y. FG-COALHAND-SC and FG-COALHAND-BR are not subject because the installation of these emission units predates the promulgation date of the NSPS.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the federal Acid Rain program promulgated in 40 CFR, Part 72.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Clean Air Interstate Rule NOx annual trading program pursuant to Rules 802a, 803, 821, and 830 through 834.

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Clean Air Interstate Rule NOx ozone season trading program pursuant to Rules 802a, 803 and 821 through 826.

 EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Clean Air Interstate Rule SO2 annual trading program pursuant to Rule 420.

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."

EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER 3-SC, EUBOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR, Part 64. These emissions unit have a control device and potential pre-control emissions of particulate matter greater than the major source threshold level. The monitoring for the control device is the continuous opacity monitor (COMS). A correlation was established through a particulate matter stack test that the particulate matter standard will not be exceeded if the opacity is below 20%.

EURAILCAR-SC, FG-COALHAND-SC, FG-ASH\_HAND-SC, FG-COALHAND-BR, FG-ASH\_HAND-BR, FG-REF-SCFC, and FG-REF-BRFC have particulate emission limits. These units have baghouse control devices which are properly maintained. Actual emissions are expected to be small. VE readings are adequate to show compliance with the PM emission limits.

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-B2796-2009 are identified in Appendix 6 of the ROP.

| **PTI Number** |
| --- |
| 21-69A | 523-81 | 261-01 |   |
| 322-72 | 56-89 | 31-04 |   |
| 418-74 | 331-98B | 203-04 |   |
| 7-75 | 383-99 | 288-05 |   |
| 412-76 | 390-99 | 177-07 |  |
| 412-76A | 379-00 |  |  |
| 483-79 | 116-01 |  |  |

**Streamlined/Subsumed Requirements**

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

**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** | **Rule 201****Exemption** | **Rule 212(4)****Exemption** |
| --- | --- | --- | --- |
| 001-416 | Tank, 10,000 gasoline storage tank | R 336.1284(g)(i) | R 336.1212(3)(c) |
| 001-427 | Unit 1 Crane Bay, Onan 15KW 20 BHp, emergency diesel engine | R 336.1285(g) | R 336.1212(4)(d) |
| 003-016 | Vent for natural gas heater in pipe shop | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 003-019 | Vent for natural gas heated in pipe shop | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 003-022 | Vent for natural gas heated in pipe shop | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 003-024 | Vent for natural gas heated in pipe shop  | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 003-026 | Vent for natural gas heated in pipe shop | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 003-028 | Vent for natural gas heated in pipe shop | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 012-021 | Vent for natural gas heated in No. 1 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 012-022 | Vent for natural gas heated in No. 1 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 012-025 | Vent for natural gas heated in No. 1 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 012-026 | Vent for natural gas heated in No. 1 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 012-033 | Vent for natural gas heated in No. 1 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 013-009 | Vent for natural gas heated in No. 2 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 013-011 | Vent for natural gas heated in No. 2 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 013-012 | Vent for natural gas heated in No. 2 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 013-013 | Vent for natural gas heated in No. 2 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 013-014 | Vent for natural gas heated in No. 2 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 014-001 | Natural gas heater discharge, No. 3 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 014-002 | Natural gas heater discharge, No. 3 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 014-004 | Natural gas heater discharge, No. 3 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 014-007 | Natural gas heater discharge, No. 3 Screen House | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 016-008a | Natural gas furnace - Old Construction Building/DMS | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 016-008b | Natural gas furnace - Old Construction Building/DMS | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 016-008c | Natural gas heater - Old Construction Building Garage | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 016-008d | Natural gas heater – Old Construction Building Garage | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 016-008e | Natural gas heater – Old Construction Building Garage | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 018-004 | Vent for clubhouse furnace, natural gas | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 018-005 | Vent for clubhouse furnace, natural gas | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 022-062A | Vent for natural gas hot water boiler (hot water heater) | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 022-062B | Vent for natural gas hot water boiler (hot water heater) | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 022-063 | Vent for natural gas hot water boiler (perimeter heating system) | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 022-184 | Stack for Hastings Heater in 3TH5 Building | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 022-219 | Stack from Applied Air Heater for 3TH6 Building | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 05-009 | Stack for Hastings Heater, 3TH8 Building | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 05-067 | Stack for Hastings Heater, 3TH7 Building | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 05-082 | Stack for Hastings Heater, 3TH8 Building | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 10-058 | Vent, natural gas heater | R 336.1282(b)(i) | R 336.1212(4)(b) |
| 10-107 | Vent on underground gasoline storage tank, Garage | R 336.1284(g) | R 336.1212(4)(c) |

**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 DEQ**

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 Christopher Ethridge, Southeast Michigan 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.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | May 21, 2015 - STAFF REPORT ADDENDUM | MI-ROP-B2796-2015 |

**Purpose**

A Staff Report dated March 9, 2015, 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 Officials:  | 1. Ms. Leann Warner Plant Manager, Fossil Generation  Section 1, St. Clair Power Plant 810-326-6201, 2. Mr. Mark VanderHeuvel Plant Manager, Fossil Generation  Section 2, St. Clair - Diesel Generator - Peakers Section 4, Belle River Peakers 810-326-32933. Mr. Timothy G. Kerry Plant Manager, Fossil Generation  Section 3, Belle River Power Plant 810-326-31994. Mr. Stephen Sorrentino VP, Wholesale Power and Renewables Section 5, DTE East China, LLC 734-302-48935. Ms. Katherine Panczak Vice President, Reduced Emissions Fuel Section 6, Belle River Fuels Company, LLC Section 7, St. Clair Fuels Company, LLC 734-302-8235 |
| AQD Contact: | Francisco S. Lim, Sr. Environmental Engineer586-753-3742 |

**Summary of Pertinent Comments**

A summary of US EPA’s comments to the draft ROP and AQD response follows below:

1. MATS (Mercury and Air Toxics Standards) is generally mentioned on page 35 and page 128, but the specific requirements aren’t in the permit.

*Response:* Permit to Install (PTI) No. 18-14 is for the installation of dry sorbent injection and activated carbon injection on the steam generating units in order to comply with MATS. The permit includes MATS requirements. Before operating the process, DTE will apply for a ROP modification to incorporate permit requirements of PTI No. 18-14. The ROP modification will be processed after this ROP renewal is issued. Since DTE has not yet made a final determination on how to comply with MATS during the start of the ROP renewal process, EPA allows high level citations for MATS compliance.

1. CAIR has not been updated to CSAPR.

*Response:* Pending further guidelines, CAIR requirements are kept but CSAPR high citation permit conditions were added.

1. There is no mention of the current enforcement action.

*Response:* A statement regarding US EPA enforcement action against DTE St. Clair/Belle River Power Plant is included in the Staff Report Addendum.

1. EU-BOILER7-SC, page 19, did not mention that it also fires biodiesel.

*Response:* Inserted the phrase “with biodiesel capability” to EU-BOILER7-SC description.

1. EU-BOILER6-SC, EU-BOILER7-SC, FG-BLRS1-4-SC: Section VI (monitoring/recordkeeping) requires maintaining fuel records for sulfur content, but shouldn’t these be checked periodically to ensure that SO2 limits aren’t being violated?

*Response:* DTE keeps a record of fuel oil specifications for each delivery. Fuel oil is sampled and analyzed periodically. Fuel oil analysis shows 0.01% sulfur for heavy oil and 0.002% sulfur for diesel oil, below permit limit of 1.0% and 0.5%, respectively.

1. EU-BOILER6-SC, EU-BOILER7-SC, FG-BLRS-1-4-SC: Section VI (monitoring/recordkeeping) requires calculating and recordkeeping for PM, PM10, PM 2.5, but what is the method of calculations? And why do calculations and recordkeeping end after 10 years of using Refined Emissions Fuel (REF) refined coal?

*Response:* PM, PM10, and PM2.5 emissions are derived from material throughput and emission factors. The requirement to conduct calculations for records that ends 10 years after REF refined coal combustion commences is a condition of Permit to Install No 164-08C and 176-09A. This was agreed upon by the permit engineer and DTE.

1. Page 24, VI.4: Requires monitoring and recordkeeping of biodiesel usage, but what is the method of doing so and what calculations are necessary to ensure compliance?

*Response:* Biodiesel will be used as an alternative to Fuel Oil No. 2 during startup, overfire air, and duct heating only for St. Clair Unit 7. The biodiesel will be stored and fed to the plant using the same equipment that is currently used for Fuel Oil No. 2. Biodiesel usage will be monitored and recorded monthly using the same equipment as used for Fuel Oil No. 2. Biodiesel fuel has not been used regularly at St. Clair Unit 7.

1. Page 24-25: Section VII. Reporting for Boiler 7 doesn’t seem to require reporting of biodiesel usage.

*Response:*  AQD does not believe that reporting of monthly biodiesel usage is necessary and only overburdens the facility. DTE certifies that conditions of the ROP are complied with, including monthly records of biodiesel usage. Biodiesel usage records are checked during inspection, together with all records not required to be reported. Biodiesel fuel has not been used regularly at St. Clair Unit 7.

1. Page 29: FG-RPSPROJECT is cited as a minor modification. Is this being handled in a separate, minor permitting action?

*Response:* In connection with the use of recycled paint solids as fuel, Permit to Install 89-10 was issued. DTE applied for an ROP minor modification to incorporate permit conditions into the ROP. This renewal will incorporate the permit conditions into the ROP renewal.

1. Page 32, VI.7: Does the PM stack testing done every 3 years verify the CAM term that 20% opacity relates to PM compliance?

*Response:* Opacity is an indicator for particulate matter (PM) compliance. DTE submitted documents verifying that the CAM indicator range is appropriate by correlating particulate matter emissions test results with average opacity obtained during the stack tests conducted in 2007, 2010, 2013 and 2014.

1. Page 100 seems empty.

*Response:* The 23 MW combustion turbine generator does not have limits and other requirements. The combustion turbine generator was installed in 1968. At the time of installation, the combustion turbine generator was exempt under Rule 336.36(c) since the generator is an internal combustion engine. Rule 336.36(c) exemption no longer applies since this rule has been rescinded.

1. Is the burning of Recovered Paint Solids (RPS) subject to NESHAP?

*Response:* No. The generator of the recycled paint solids claims that it is not a hazardous waste, therefore St. Clair Unit 7 is not subject to the Hazardous Waste Combustor NESHAP, 40 CFR 63 Subpart EEE. Section 129 of the Clean Air Act requires EPA to develop new source performance standards (NSPS) and emission guidelines for four classes of solid waste incineration units. Utility boilers are not included.

1. Is there public interest in this ROP?

*Response*: AQD only received comments from EPA and DTE.

A summary of DTE Electric Company’s comments to the draft ROP and AQD response follows below:

1. CAM  Monitoring and Record Keeping Permit Condition Language: Current ROP conditions for CAM requirements were concise summaries of the requirements. These have been replaced with conditions that contain almost exact verbiage from the applicable regulation, lengthening the permit complicating the conditions. DTE had requested retaining the existing more concise wording of these requirements consistent with the previous ROPs. DTE would like to note that these conditions are now less flexible if the underlying requirements change in the future, and if that were to happen DTE reserves the right to request through a PTI process that these permit conditions revert back to the original conditions.

*Response:* DTE’s comments are acknowledged.

1. Page 50, St. Clair, FG-IBMACT-SC, III.5:  These boilers are being brought into the ROP to incorporate their IB MACT requirements. They would otherwise not be included in the ROP. Fuel metering is not an IB MACT requirement for these boilers. Request the removal of the requirement III.5 to install a fuel meter. The underlying regulation listed, R 336.1213(3), is not applicable: There is no Emission Limit or Material Limit in the ROP, therefore no need for an operational restriction of a fuel meter to show compliance with permit limits.

*Response:* There is no limit for natural gas. But the limit for all other fuel is zero. A natural gas fuel meter is a compliance monitoring tool to demonstrate that only natural gas is used as fuel. ROP condition requiring fuel meter will be retained.

1. Page 136, Belle River, FG-COALHAND-BR, Description: In Spring of 2015, there was a dust collector upgrade from two dry dust collectors (Cascades Room 3DC106 and Boiler No. 2 Coal Silo 3DC105) to one wet dust collector (Boiler No. 2 Coal Silos Wet Dust Collection System 3DC113), an “insignificant change” per R 336.1215(4). Request that “Cascades Room 3DC106” and “Boiler No. 2 Coal Silo 3DC105” be removed from the description and that “Boiler No. 2 Coal Silos Wet Dust Collection System 3DC113” be added.

*Response:* Requested change is accepted.

1. Page 194, Belle River Peakers, FG-CTG-BP, III.2: DTE Energy is in the process of filing an ROP Modification Application to include a change to condition III.2 made with PTI 177-07A: Replace the wording in parentheses “(i.e. loads greater than 70%)” with wording in PTI 177-07A “(e.g. when premix operating mode is achieved.)”. PTI 177-08A was issued 02/20/2015.

*Response:* Requested change is accepted.

1. Page 254, BRFC, FG-REF-BRFC, III.2: Change the first sentence from “The permittee shall maintain and implement a malfunction abatement plan (MAP) as described in Rule 911(2), for FG-REF-BRFC, has been submitted within 180 days of permit issuance, and is implemented and maintained.” to the sentence “The permittee shall maintain and implement a malfunction abatement plan (MAP) as described in Rule 911(2), for FG-REF-BRFC”. Changing the first sentence eliminates awkward language from the conversion of PTI condition to ROP condition and matches wording of the same condition for FG-REF-SCFC.

*Response:* Requested change is accepted.

1. Page 275, St. Clair Fuels Co, FG-REF-SCFC, III.1 & III.2: Correct ‘FG-CHEMMOD-SC to ‘FG-REF-SCFC’ throughout conditions III.1 and III.2.

*Response:* Requested change is accepted.

1. Staff Letter, Page 3, Responsible Official: Can be corrected for sections 1 and 2 as stated below:

a. Replace Mr. Justin L. Morren with Ms. Leann Warner. The title and phone number do not need to be changed.

b. Replace Mr. Nader Rajabian with Mr. Mark VanderHeuvel. Update phone number to 810-326-3293.

*Response:* Requested change is reflected in the Staff Report Addendum.

**Changes to the March 9, 2015 Draft ROP**

The following changes were made to the draft ROP.

1. CSAPR high citation permit conditions were added to FG-BLR\_GEN-SC, IX.5, IX.8, and IX.11 (Section 1), FG-BOILERS-BR, IX.5, IX.8, and IX.11 (Section 3), FG-CTG-BP, IX.7, IX.10, and IX.13 (Section 4), and FG-CTG-DP, IX.6, IX.9, and IX.12 (Section 5).
2. In the Emission Unit Summary Table (Section 1), EU-BOILER7-SC description was modified to add biodiesel fuel capability.
3. For Belle River Power Plant (Section 3), FG-COALHAND-BR, “Cascades Room 3DC106” and “Boiler No. 2 Coal Silo 3DC105” were removed from the description. Added “Boiler No. 2 Coal Silos Wet Dust Collection System 3DC113” to the description.
4. For Belle River Peakers (Section 4), FG-CTG-BP, III.2, the description “i.e. loads greater than 70%” was replaced with “e.g. when premix operating mode is achieved.”
5. For Belle River Fuels Company (Section 6), FG-REF-BRFC, III.2, the first sentence was changed to “The permittee shall maintain and implement a malfunction abatement plan (MAP) as described in Rule 911(2), for FG-REF-BRFC”.
6. For St. Clair Fuels Company (Section 7), FG-REF-SCFC, III.1 and III.2, “FG-CHEMMOD-SC” was corrected to “FG-REF-SCFC” throughout conditions III.1 and III.2.

**Additional Information Added to the Staff Report**

1. In 2009, US EPA issued a Notice of Violation and Finding of Violation regarding allegations of noncompliance with the Prevention of Significant Deterioration requirements, Non-attainment New Source Review, New Source Performance Standards, Operating Permit requirements under Title V of the Clean Air Act, and Michigan State Implementation Plan – Opacity Standard (SIP).
2. The MATS (Mercury and Air Toxics Standards) requirements will be added at a later date when the ROP is modified. DTE is expected to apply for a ROP modification by June 2015 to incorporate the requirements of Permit to Install No. 18-14. This permit contains the MATS requirements.
3. Rule 336.36(c) was an exemption for an internal combustion engine. Although this rule has been rescinded, the 23 MW combustion turbine generator included in Section 2 was exempt under Rule 336.36(c) at the time of installation in 1968.
4. EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER3-SC, EU-BOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Transport Rule NOX Annual Trading Program pursuant to 40 CFR Part 97, Subpart AAAAA
5. EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER3-SC, EU-BOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Transport Rule NOx Ozone Trading Program pursuant to 40 CFR Part 97, Subpart BBBBB.
6. EU-BOILER1-SC, EU-BOILER2-SC, EU-BOILER3-SC, EU-BOILER4-SC, EU-BOILER6-SC, EU-BOILER7-SC, EU-BOILER1-BR, EU-BOILER2-BR, EU-CTG12-1-BP, EU-CTG12-2-BP, EU-CTG13-1-BP, EU-CTG01-DP, EU-CTG02-DP, EU-CTG03-DP, and EU-CTG04-DP at the stationary source are subject to the Transport Rule SO2 Group 1 Trading Program pursuant to 40 CFR Part 97, Subpart CCCCC.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | November 4, 2015 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION | MI-ROP-B2796-2015a |

**Purpose**

On July 15, 2015, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2796-2015 to DTE Electric Company St. Clair/Belle River Power Plant pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | 201500058: Ryan Randazzo, Plant Manager, Fossil Generation201500074: Timothy G. Kerry, Plant Manager, Fossil GenerationLeann Warner, Plant Manager, Fossil Generation201500129: Leann Warner, Plant Manager |
| AQD Contact:  | Kirsten S. Clemens, P.E., Environmental Engineer517-582-5913 |
| Application Numbers: | 201500058 (Section 4); 201500074 (Sections 1 and 3) |
| Dates Application For Minor Modification Were Submitted: | April 20, 2015; May 15, 2015 |

**Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

**Description of Changes to the ROP**

Application No. 201500058: Incorporate PTI No. 177-07A into Section 4 (Belle River Peakers). The focus of this PTI relates to load ranges between 50 and 70 percent. The existing ROP (MI-ROP-B2796-2015) treats these loads as Startup/Shutdown/Malfunction (SSM) operating hours, with a maximum of 500 per year, per unit. Recent installation of automated governor controlled (AGC) systems on these generators provides control to the regional electrical system operator (MISO) to, likely, operate these units in this critical load range more frequently. DTE believes this supporting material justifies the operating conditions as steady state, not SSM.

Application No. 201500074: Incorporate PTI No. 18-14 into Sections 1 (St. Clair Power Plant) and 3 (Belle River Power Plant). This PTI is for installation of air emission control systems, Dry Sorbent Injection (DSI) and Activated Carbon Injection (ACI), on Belle River Units 1 and 2, and on St. Clair Units 1, 2, 3, 4, 6, and 7 as part of the proposed Mercury and Air Toxics Standards (MATS) in accordance with 40 CFR Part 63, Subpart UUUUU. Existing EGUs must comply with this subpart not later than April 16, 2015, unless they receive an extension (which DTE has received), then they must comply no later than April 16, 2016. DTE has received an extension and have also received a waiver to construct and have started construction.

Application No. 201500129: The application is to remove EU-BURNHAM-SC from the flexible group FG-IBMACT-SC. The unit has received a determination from USEPA dated October 9, 2015 that the unit is not subject to Subpart DDDDD. The unit does not heat water, it heats glycol for space heating and therefore does not meet the definition of process heater under the Subpart DDDDD. FG-IBMACT-SC has been removed and emission unit conditions are now under EU-FULTON-SC. EU-BURNHAM-SC is exempt under Rule 336.1282(b)(i).

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

**Action Taken by the DEQ**

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B2796-2015, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification 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 requirements, and resolution of any objections by any affected states or the USEPA.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| **B2796** | November 4, 2015 - STAFF REPORT FOR RULE 216(1)(a)(i)‑(iv) ADMINISTRATIVE AMENDMENT | MI-ROP-B2796-2015a |

**Purpose**

On July 15, 2015, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2796-2015 to DTE Electric Company St. Clair/Belle River Power Plant pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(1)(a)(i-iv).

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | Brian Kincaid, Plant Director |
| AQD Contact:  | Kirsten S. Clemens, P.E., Environmental Engineer517-582-5913 |
| Application Number: | 201500180 |
| Date Application For Administrative Amendment Was Submitted: | October 1, 2015 |

**Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to R 336.1216(1)(a)(ii).

**Description of Changes to the ROP**

Name change for Section 5 from DTE East China, LLC to DTE Electric Company – Dean Peakers.

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Administrative Amendment to the ROP.

**Action Taken by the DEQ**

The AQD approved an Administrative Amendment to ROP No. MI-ROP-B2796-2015, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | December 15, 2015 - STAFF REPORT ADDENDUM FOR RULE 216(2) MINOR MODIFICATION | MI-ROP-B2796-2015a |

**Purpose**

A Staff Report dated November 4, 2015, was developed in order to set forth the applicable requirements and factual basis for the proposed Minor Modification to the Renewable Operating Permit’s (ROP) terms and conditions as required by R 336.1216(2)(c). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP modification during the U.S. Environmental Protection Agency’s (USEPA) 45-day comment period as described in R 336.1216(2)(c). In addition, this addendum describes any changes to the proposed ROP Minor Modification resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | 201500058: Ryan Randazzo, Plant Manager, Fossil Generation201500074: Timothy G. Kerry, Plant Manager, Fossil GenerationLeann Warner, Plant Manager, Fossil Generation201500129: Leann Warner, Plant Manager |
| AQD Contact: | Caryn E. Owens, Environmental Quality Analyst231-876-4414 |

**Summary of Pertinent Comments**

No pertinent comments were received during the USEPA’s 45-day comment period.

**Changes to the November 4, 2015 Proposed ROP Minor Modification**

No changes were made to the proposed ROP Minor Modification.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | March 7, 2016 - STAFF REPORT FOR RULE 217(2) REOPENING | MI-ROP-B2796-2015b |

**Purpose**

On July 15, 2015, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2796-2015 to DTE ELECTRIC COMPANY

ST. CLAIR/BELLE RIVER POWER PLANT pursuant to R 336.1214. Once issued, the AQD is required to reopen the ROP if the criteria described in R 336.1217 are met. Only those conditions to be added or changed in the ROP are to be considered during this public comment period. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1217.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | 1. Ms. Leann Warner Plant Manager, Fossil Generation  Section 1, St. Clair Power Plant 810-326-6201, 2. Mr. Mark VanderHeuvel Plant Manager, Fossil Generation  Section 4, Belle River Peakers 810-326-32933. Mr. Timothy G. Kerry Plant Manager, Fossil Generation  Section 3, Belle River Power Plant 810-326-31994. Mr. Stephen Sorrentino VP, Wholesale Power and Renewables Section 5, DTE East China, LLC 734-302-4893 |
| AQD Contact: | Brian Carley, Environmental Quality Specialist517-780-7843 |
| Date Public Comment Begins: | March 7, 2016 |
| Deadline for Public Comment: | April 6, 2016 |

**Regulatory Analysis**

The AQD has determined that the ROP must be reopened because on January 1, 2015 the Transport Rule (a.k.a. Cross State Air Pollution Rule (CSAPR)) went into effect replacing the Clean Air Interstate Rule (CAIR).

**Description of Changes to the ROP**

The CAIR Annual SO2 Permit in Appendices 10-SC, 10-BR,10-BP, and 10-DP, CAIR Annual NOx Budget Permit in Appendices 11-SC, 11-BR,11-BP, and 11-DP, and CAIR Ozone NOx Budget Permit in Appendix 12-SC, 12-BR,12-BP, and 12-DP were removed from the ROP. The requirements of CSAPR were inserted into Appendices 10-SC, 10-BR,10-BP, and 10-DP. In Table FG-BLR\_GEN-SC, Section IX, the language referencing CAIR was removed and replaced with the requirements to comply with the provisions of the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Trading Program, and the CSAPR SO2 Group 1 Trading Program and identified in Appendix 10-SC. In Table FG-BOILERS-BR, Section IX, the language referencing CAIR was removed and replaced with the requirements to comply with the provisions of the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Trading Program, and the CSAPR SO2 Group 1 Trading Program and identified in Appendix 10-BR. In Table FG-CTG-BP, Section IX, the language referencing CAIR was removed and replaced with the requirements to comply with the provisions of the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Trading Program, and the CSAPR SO2 Group 1 Trading Program and identified in Appendix 10-BP. In Table FG-CTG-DP, Section IX, the language referencing CAIR was removed and replaced with the requirements to comply with the provisions of the CSAPR NOx Annual Trading Program, CSAPR NOx Ozone Trading Program, and the CSAPR SO2 Group 1 Trading Program and identified in Appendix 10-DP.

**Action Taken by the Department**

The AQD proposes to approve this change to ROP No. MI-ROP-B2796-2015a, which was reopened by the AQD in order to incorporate CSAPR. A final decision on the approval of the revised ROP will not be made until the public and any affected states have had an opportunity to comment on the proposed changes to the ROP and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is Chris Ethridge, Southeast Michigan District Supervisor. The final determination for approval of the revised ROP will be based on a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by the public, any affected states or the USEPA.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | April 26, 2016 - STAFF REPORT ADDENDUM FOR RULE 217(2) REOPENING | MI-ROP-B2796-2015b |

**Purpose**

A Staff Report dated March 7, 2016, was developed in order to set forth the applicable requirements and factual basis for the draft reopening to Renewable Operating Permit’s (ROP) terms and conditions as required by R 336.1214(3). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP reopening during the 30-day public and affected state(s) comment period as described in R 336.1214(3) and (4). In addition, this addendum describes any changes to the proposed ROP reopening resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | 1. Ms. Leann Warner Plant Manager, Fossil Generation  Section 1, St. Clair Power Plant 810-326-6201, 2. Mr. Mark VanderHeuvel Plant Manager, Fossil Generation  Section 4, Belle River Peakers 810-326-32933. Mr. Timothy G. Kerry Plant Manager, Fossil Generation  Section 3, Belle River Power Plant 810-326-31994. Mr. Stephen Sorrentino VP, Wholesale Power and Renewables Section 5, DTE East China, LLC 734-302-4893 |
| AQD Contact: | Brian Carley, Environmental Quality Specialist517-780-7843 |

**Summary of Pertinent Comments**

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

**Changes to the** **March 7, 2016 Draft ROP Reopening**

No changes were made to the draft ROP reopening.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | June 16, 2016 - STAFF REPORT ADDENDUM FOR RULE 217(2) REOPENING | MI-ROP-B2796-2015b |

**Purpose**

A Staff Report dated April 26, 2016, was developed in order to set forth the applicable requirements and factual basis for a proposed reopening to Renewable Operating Permit’s (ROP) terms and conditions as required by R 336.1214(3). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP reopening during the U.S. Environmental Protection Agency’s (USEPA), 45-day comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the proposed ROP reopening resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | 1. Ms. Leann Warner Plant Manager, Fossil Generation  Section 1, St. Clair Power Plant 810-326-6201, 2. Mr. Mark VanderHeuvel Plant Manager, Fossil Generation  Section 4, Belle River Peakers 810-326-32933. Mr. Timothy G. Kerry Plant Manager, Fossil Generation  Section 3, Belle River Power Plant 810-326-31994. Mr. Stephen Sorrentino VP, Wholesale Power and Renewables Section 5, DTE East China, LLC 734-302-4893 |
| AQD Contact: | Brian Carley, Environmental Quality Specialist517-780-7843 |

**Summary of Pertinent Comments**

No pertinent comments were received during the USEPA’s 45-day comment period.

**Changes to the April 26, 2016 Proposed ROP Reopening**

No changes were made to the proposed ROP reopening.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B2796 | July 15, 2019 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT | MI-ROP-B2796-2015c |

**Purpose**

On June 16, 2016, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2796-2015b to DTE Electric Company - St. Clair/Belle River Power Plant pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(1)(a)(i-iv).

**General Information**

|  |  |
| --- | --- |
| Responsible Official: | Section 4: Margaret Guillaumin, Plant Manager - Power Plants and Peakers810-324-3218 |
| AQD Contact: | Caryn E. Owens, Environmental Engineer231-878-6688 |
| Application Number: | 201900105 |
| Date Application for Administrative Amendment was Submitted: | June 10, 2019 |

**Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to Rule 216(1)(a)(iii).

The capacity factor was exceeded for the Belle River Peaking facility, and therefore a Continuous Emission Monitor System (CEMS) and associated reporting is necessary to be incorporated into the ROP, and DTE Electric Company wanted the monitoring, record keeping, and reporting requirements in the ROP to clearly delineate requirements under CEMS.

**Description of Changes to the ROP**

Administrative Amendment No. 201900105 was to add monitoring, record keeping, and reporting requirements to add CEMS for nitrogen oxides (NOx) on emission units EU-CTG12-1-BP, EU-CTG12-2-BP, and EU-CTG13-1-BP as required by FG-CTG-BP in Section 4 of the ROP. A combustion monitoring system will be installed prior to installation of the CEMS. Additionally, Appendix 3-BP was added with extra monitoring requirements associated with the NOx CEMS, and a sentence was added to Appendix 7-BP. The additional monitoring, record keeping, and reporting will make the ROP more stringent, and no other applicable requirements were removed during this Administrative Amendment.

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Administrative Amendment to the ROP.

**Action Taken by the EGLE**

The AQD approved an Administrative Amendment to ROP No. MI-ROP-B2796-2015b, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.