

Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number  
B2798

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-B2798-2017a

DTE ELECTRIC COMPANY - DELRAY PEAKING FACILITY

SRN: B2798

Located at

6603 West Jefferson, Detroit, Wayne, Michigan 48209

Permit Number: MI-ROP-B2798-2017a

Staff Report Date: February 20, 2017

Amended Date: July 1, 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) 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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**RENEWABLE OPERATING PERMIT**

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**FEBRUARY 20, 2017 STAFF REPORT**

MI-ROP-B2798-2017

**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 Delray Power Plant 6603 W. Jefferson Detroit, Michigan 48217
Source Registration Number (SRN):	B2798
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:	201600075
Responsible Official:	Ryan Randazzo, Plant Manager Fossil Generation 734-231-1140
AQD Contact:	Jorge Acevedo, Senior Environmental Engineer 313-456-4679
Date Permit Application Received:	April 14, 2016
Date Application Was Administratively Complete:	April 14, 2016
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	February 20, 2017
Deadline for Public Comment:	March 22, 2017

## **Source Description**

DTE Electric Delray Power Plant is located at 6603 West Jefferson, in the City of Detroit, County of Wayne. The property is bordered on the East by the Detroit River, on the West by Jefferson Avenue, on the South by the yellow freight Company, and on the North by Fort Wayne. The nearest residence is 1/2 mile to the West across Jefferson Avenue.

DTE Electric Delray Power Plant is the site of a former steam/electricity generating plant which was shut down in 1988. Prior to installation of the two combustion turbine generators (CTG's) the site functioned only as a substation and all previously used combustion sources had been decommissioned and removed from the site. The CTG's do not operate continuously but are activated during periods of peak demand.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2015**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	0.65
Nitrogen Oxides (NO <sub>x</sub> )	3.18
Particulate Matter (PM)	0.41

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 located in Wayne County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants except SO<sub>2</sub>. A small portion of Wayne County has been designated by the USEPA as non-attainment area with respect to the 1-hour sulfur dioxide (SO<sub>2</sub>) standard. DTE Electric Delray Power Plant is located within the SO<sub>2</sub> nonattainment area.

The stationary source is subject to Title 40 Code of Federal Regulations, Part 70 because it is an affected source as defined in section 402 of the clean air act. Detroit Electric Delray Power Plant has emission units subject to the federal Acid Rain program promulgated in Title 40 of the Code of Federal Regulations, Part 72.

In 1999, a "synthetic minor" permit for the stationary source, Permit to Install No. 373-98, was issued for two combustion turbine generators. In the ROP, these emission units are identified as EU1 and EU2 or flexible group, FGCTG. 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 nitrogen oxides and carbon monoxide to less than 100 tons per year.

FGCTG is subject to the New Source Performance Standards for Stationary Gas Turbines promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and GG. 40 CFR Part 60, Subpart GG was amended on July 8, 2004. The subpart was amended to allow the use of most of the methods specified in sections 2.2.5 and 2.3.3.1.2 of 40 CFR part 75, appendix D to determine the total sulfur content of gaseous fuel. Therefore, the custom fuel sampling and analysis plan approved by U.S. EPA on October 13, 1999 is no longer mandatory. 40 CFR 60.334(h)(3) states:

“Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.”

Also, in the July 8, 2004 amendments, the subpart deleted the test method for measuring Hydrogen Sulfide, which was one of the conditions of the 1999 custom fuel sampling and analysis plan. Conditions were placed in the draft ROP to reflect the monitoring changes that took place in the subpart.

EU01 and EU02 at the stationary source are subject to the federal Acid Rain program promulgated in 40 CFR of, Part 72.

EU01 and EU02 at the stationary source are subject to the Transport Rule NO<sub>x</sub> Annual Trading Program pursuant to 40 CFR 97, Subpart AAAAA.

EU01 and EU02 at the stationary source are subject to the Transport Rule NO<sub>x</sub> Ozone Trading Program pursuant to 40 CFR 97, Subpart BBBB.

EU01 and EU02 at the stationary source are subject to the Transport Rule SO<sub>2</sub> Group 1 Trading Program pursuant to 40 CFR 97, Subpart CCCCC.

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 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.

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-B2798-2011 are identified in Appendix 6 of the ROP.

PTI Number			
373-98	NA	NA	NA

### **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**

There were no processes listed in the ROP application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

### **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 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 Wilhemina McLemore, Detroit 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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**RENEWABLE OPERATING PERMIT**

**MARCH 28, 2017 STAFF REPORT ADDENDUM**

ROP Number

MI-ROP-B2798-2017

**Purpose**

A Staff Report dated February 20, 2017, 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:	Ryan Randazzo, Plant Manager Fossil Generation 734-231-1140
AQD Contact:	Jorge Acevedo, Senior Environmental Engineer 313-456-4679

**Summary of Pertinent Comments**

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

**Changes to the February 20, 2017 Draft ROP**

No changes were made to the draft ROP.

State Registration Number

## RENEWABLE OPERATING PERMIT

ROP Number

B2798

**JULY 1, 2019 STAFF REPORT FOR RULE 216(1)(a)(i)-  
(iv) ADMINISTRATIVE AMENDMENT**

MI-ROP-B2798-2017a

### Purpose

On May 17, 2017, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2798-2017 to DTE Electric Company - Delray Peaking Facility 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

Stationary Source Mailing Address:	DTE Electric Company – Delray Peaking Facility Attn: Air Emission Quality Group 1 Energy Plaza 405 GO Detroit, Michigan 48226
Responsible Official:	Margaret E. Guillaumin, Plant Manager Fossil Generation 810-324-3218
AQD Contact:	Caryn E. Owens, Environmental Engineer 231-878-6688
Application Number:	201900096
Date Application for Administrative Amendment was Submitted:	May 15, 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)(i).

### Description of Changes to the ROP

This Administrative Amendment was used to correct the zip code for the facility that was originally listed in 48217. The correct zip code for the facility is 48209. Additionally, DTE Electric Company requested to have the name of the facility changed from "DTE Electric Delray Power Plant" to "DTE Electric Company - Delray Peaking Facility" to better align the name with the other DTE Electric Company peaking facilities.

AQD also updated the Permittee and zip code in the Acid Rain Permit, as well as updated the acid rain permit number. Therefore, a Revision Date was added in Appendix 9 of the ROP.

The Stationary Source Mailing Address was added to the General Information above, since the General Information at the beginning of the February 20, 2017 Staff Report is not a deliverable mailing address, it is only the physical facility address.

### **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-B2798-2017, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.