



Michigan Department of Natural Resources and
Environment
Air Quality Division

State Registration Number

B2811

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number

MI-ROP-B2811-201X

DTE Energy Trenton Channel Power Plant

SRN: B2811

Located at

4695 W. Jefferson Avenue, Trenton, Michigan 48183

Permit Number: MI-ROP-B2811-201X

Staff Report Date: May 23, 2011

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

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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 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:	Detroit Edison -- Trenton Channel Power Plant 4695 W. Jefferson Avenue Trenton, Michigan 48183
Source Registration Number (SRN):	B2811
North American Industry Classification System (NAICS) Code:	4911
Number of Stationary Source Sections:	2
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800031
Responsible Official:	Section 1 -- Dan Braker, Plant Manager (734) 362-2201 Section 2 -- Tom Tanciar, Plant Manager -- Peakers (313) 897-1065
AQD Contact:	Jill C. Placco, Environmental Engineer (313) 456-4689
Date Permit Application Submitted:	March 24, 2008
Date Application Was Administratively Complete:	March 24, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	May 23, 2011
Deadline for Public Comment:	June 22, 2011

Source Description

Trenton Channel Power Plant is located in the city of Trenton, Wayne County, on both the east and west sides of Jefferson Avenue and along the Detroit River. It is located primarily in a residential area, with the nearest residential areas immediately to the north and the south of the facility.

Trenton Channel Power Plant operates five coal and oil fired boilers, an electrostatic precipitator, coal handling equipment, flyash handling equipment, parts cleaners (cold cleaners), and five oil fired Slocum peaker generating units. The source is divided into two sections with the five oil fired Slocum peaker generating units in Section 2 and the rest in Section 1.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2009** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	504.27
Lead (Pb)	0.11
Nitrogen Oxides (NO _x)	5161.31
Particulate Matter (PM)	503.12
Sulfur Oxides (SO _x)	25443.03
Volatile Organic Compounds (VOCs)	0.36

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

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Wayne County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as a non-attainment area with respect to the PM2.5.

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

The stationary source is subject to Prevention of Significant Deterioration (PSD) (40 CFR 52.21) regulations because the stationary source has the potential to emit of carbon dioxide, nitrogen oxides, particulate matter, and sulfur dioxide greater than 100 tons and the fossil fuel boilers at the stationary source have a combined heat input of greater than 250 million BTU per hour.

Please refer to Section E and Section F in the enclosed draft permit for detailed regulatory citations for each Emission Unit at the stationary source. Section A contains regulatory citations for General Conditions.

EU-BOILER9A and EU-BOILER#16 through EU-BOILER#19 at the stationary source are subject to the Clean Air Interstate Rule (CAIR) Sulfur Dioxide Budget Trading program pursuant to Rule 420.

EU-BOILER9A and EU-BOILER#16 through EU-BOILER#19 at the stationary source are subject to the (CAIR) Nitrogen Oxide Budget Trading program pursuant to Rule 802a, 803, 821 and 830 through 834.

EU-BOILER9A and EU-BOILER#16 through EU-BOILER#19 at the stationary source are subject to the (CAIR) Ozone Nitrogen Oxide Budget Trading program pursuant to Rule 802a, 803, 821 through 826.

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

EU-BOILER9A and EU-BOILER#16 through EU-BOILER#19 at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under Title 40 of the Code of Federal Regulations (CFR), Part 64. These emission units have control devices and potential pre-control emissions of particulate matter greater than the major source threshold level.

EU-BOILER9A and EU-BOILER#16 through EU-BOILER#19 at the stationary source are subject to the federal Acid Rain program promulgated in 40 CFR Part 72.

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 effect date of ROP No. 199600204 are identified in Appendix 6 of the ROP.

PTI Number		
C-4712	C-5631	C-5697
C-4713	C-5632	C-3902
C-4714	C-5633	189-00
C-4715	C-5634	

Equivalent Requirements

This permit does not include any equivalent requirements pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original PTI, a Consent Order/Judgment, and/or the State Implementation Plan.

Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt Emission Unit ID	Description of Exempt Emission Unit	ROP Exemption	PTI Permit Exemption
EU-GASTANK	Underground Storage Tank - Warehouse A, EU#080-042	R 336.1212(4)(d)	R 336.1285(g)
EU-DG_IN_POWERHS	Diesel Engine/Generator Set located in powerhouse (16HP).	R 336.1212(4)(b)	R 336.1282
EU-CRANE_FURNACE	Crane Shelter Furnace	R 336.1212(4)(c)	R 336.1284(g)
EU-TRACTOR_FURN	Tractor House Furnace	R 336.1212(4)(b)	R 336.1282

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 Chris Ethridge, Acting 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.