



State Registration Number

M4199

Michigan Department of Environmental Quality
Air Quality Division

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number

MI-ROP-M4199-2010

General Motors Hamtramck

SRN: M4199

Located at

2500 E. General Motors Blvd., Detroit, Michigan 48211

Permit Number: MI-ROP-M4199-2010

Staff Report Date: August 31, 2009

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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STAFF REPORT**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:	2500 E. General Motors Blvd. P.O. Box 431301 Detroit, Michigan 48211
Source Registration Number (SRN):	M4199
North American Industry Classification System (NAICS) Code:	3711
Number of Stationary Source Sections:	2
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800063
Responsible Official:	Section 1: Theresa A. Quigley, Plant Manager Section 2: Thomas W. Neelands, Director of Energy and Utility Services
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182
Date Permit Application Submitted:	May 15, 2008
Date Application Was Administratively Complete:	May 21, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	August 31, 2009
Deadline for Public Comment:	September 30, 2009

Source Description

The General Motors Corporation – Detroit Hamtramck Assembly Plant consists of an automobile assembling operation, and a utilities plant with hot water boiler operations. Descriptions of each emission unit are included in the attached Renewable Operating Permit.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2007** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	148.7
Lead (Pb)	0.4
Nitrogen Oxides (NO _x)	360
Particulate Matter (PM)	10.4
Sulfur Dioxide (SO ₂)	563.9
Volatile Organic Compounds (VOCs)	523.8
Total Hazardous Air Pollutants (HAPs)	Not Calculated

**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 attainment/unclassified for all criteria pollutants except ozone.

Wayne County is currently designated by the U.S. Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because:

- the potential to emit for Volatile Organic Compounds, Carbon Monoxide, Nitrogen Oxides, Particulate Matter, and Sulfur dioxide exceeds 100 tons per year.
- the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is more than 10 tons per year and/or the potential to emit of all HAPs combined is more than 25 tons per year.

The stationary source has emission units that were subject to R 336.1220 for Major Offset Sources at the time of New Source Review permitting.

EU-Primersurfacer and EU-Topcoatssystem at the stationary source are subject to the New Source Performance Standards for Automobile and Light Duty Truck Surface Coating Operations promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and MM.

EU-Primersurfacer, EU-Topcoatsystem , EU-FinalRepair, EU-Glassinstl, EU-Slrsadhs, and EU-Deadner at the stationary source is/are subject to the Maximum Achievable Control Technology Standards for Surface Coating of Automobiles and Light Duty Trucks promulgated in Title 40 of the Code of Federal Regulations (CFR), Part 63, Subparts A and IIII.

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-Primersurfacer, and EU-Topcoatsystem at the stationary source is 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 a control device and potential pre-control emissions of volatile organic compounds greater than the major source threshold level.

FG-Powerhouse, at the stationary source is subject to the federal Compliance Assurance Monitoring (CAM) rule under Title 40 of the Code of Federal Regulations (CFR), Part 64. This emission unit has a control device and potential pre-control emissions of particulate matter greater than the major source threshold level.

EU-HOPPER at the stationary source is subject to the New Source Performance Standards for Coal Preparation Plants promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and Y.

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. PTIs issued after the effective date of ROP No. MI-ROP-M4199-2003 are identified in Appendix 6 of the ROP.

The following table lists all individual PTIs that were incorporated into previous ROPs.

PTI Number			
159-81A	159-81B	159-81D	159-81E
159-81F	159-81G	C5722 through C-5776	C6360 through C6393
C8532,	C8533	C8976 through C-8984	C10042
8-03	125-81C	C5722 through C5776	

Equivalent Requirements

The following table lists explanations of any equivalent requirements included in the draft permit pursuant to Rule 213(2)(c). Equivalent requirements are enforceable applicable requirements which 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
EU00138	Hamtramck Assembly's cafeteria	R212(4)(B)	R282(e)
EU00139	Internally vented cutting, grinding, etc., operations	R212(3)(f)	R285(l)(vi)
EU00143	Storage of butane, propane, or liquefied petroleum gas in a vessel that has a capacity less than 40,000 gallons	R212(4)(c)	R284(b)
EU00140	Natural gas burning equipment less than 50 MMBTU/hr heat input as described under Rule 282(b)(i)	Subpart Dc?	R2852(b)(i)
EU00141	Internal combustion engines that have less than 10,000,000 Btu/hour maximum heat input. Roll testing of vehicles.	R212(d)(d)	R285(g)
EU000142	Fuel burning equipment used for space heating, service water heating, electric power generation, oil and gas production or processing, or indirect heating and which burns only the following: Number 1 fuel oil, number 2 fuel oil, distillate oil, the gaseous fuels specified in paragraph (i) of this subdivision, or a combination thereof which contains not more than 0.40% sulfur by weight and the equipment has a rated heat input capacity of not more than 20,000,000 Btu/hour.	Subpart Dc?	R282(b)(ii)

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 Teresa Seidel, 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.



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December 23, 2009 STAFF REPORT ADDENDUM

Purpose

A Staff Report dated August 31, 2009, 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:	Theresa A. Quigley, Plant Manager Thomas W. Neelands, Director of Energy and Utility Services
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182

Summary of Pertinent Comments

Company Comment:

Page 16 Emission Unit Summary Table – Please change “A microcrystals is” to “Microcrystals are” in the description of EU-Pretreatment.

AQD Response:

The AQD agrees and has made the change.

Company Comment:

Page 19 Pretreatment Description – Please change “A microcrystals is” to “Microcrystals are” in the description section.

AQD Response:

The AQD agrees and has made the change.

Company Comment:

Page 38 Pollution Control Equipment – Please change to “dry filters, or downdraft water wash”.

AQD Response:

The AQD has changed the pollution control equipment description to:
“Dry filters or downdraft water wash particulate control system.”

Company Comment:

Page 56 Flexible Group Summary Table – Please remove the description under FGFUELFILL that “Each new vehicle will be filled with gasoline.”

AQD Response:

The AQD has removed the statement: “Each new vehicle will be filled with gasoline.”

Company Comment:

Page 67 FGFUELFILL – Please remove the statement from the Description that “Each new vehicle will be filled with gasoline.”

AQD Response:

The AQD has removed the statement: “Each new vehicle will be filled with gasoline.”

Company Comment:

Page 97 EU-Coal Hopper IX.1- EPA never intended for NSPS Subpart Y to apply to the Detroit Hamtramck Assembly facility which purchases pre-sized coal. The Detroit Hamtramck facility uses over 200 tons/day, but it is not in the business of sizing or crushing coal. Therefore, General Motors requests that the reference to NSPS Subpart Y be removed.

AQD Response:

The AQD disagrees with this comment and no changes have been made. By definition of coal preparation plant, “means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying”. The AQD understands that this facility has crushing and screening equipment installed as a portion of EU-Hopper, therefore this emission unit meets the definition of coal preparation plant.

Company Comment:

Page 100 FG POWERHOUSE III.2.b – Please change the statement to read “The Permittee shall not operate FGPOWERHOUSE unless an Abatement Measures and Reporting Procedure for Bag Filter Malfunction at Detroit Hamtramck Powerhouse Operation is followed.”² (R°336.1301, R°336.1331, R°336.1901)”.

AQD Response:

The AQD has changed the language in SC III.2.b to read as follows:

- b. The Permittee shall not operate FGPOWERHOUSE unless the Abatement Measures and Reporting Procedures for Bag Filter Malfunctions at the Detroit Hamtramck Powerhouse Operations are followed.² (R°336.1301, R°336.1331, R°336.1901)

Company Comment:

Page 102 FG POWERHOUSE VI.9 – Please clarify the last sentence of this section. “CAM exceedances/excursions tri initial inspections, corrective action(s), and redkeeping of the probable cause and corresponding resolution. (40 CFR 64.7(d))” General Motors is unclear about the meaning of some of the wording.

AQD Response:

The AQD has moved SC VI.9 from a Monitoring/Recordkeeping condition to SC III.3 as a Process/Operational Restriction. The in the new III.3 will read as follows:

III. PROCESS/OPERATIONAL RESTRICTION(S)

3. Upon detecting CAM exceedance(s)/excursion(s), the permittee shall restore operation of the pollutant specific emission unit, including control device and associated pollutant capture system equipment to its

normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. **(40 CFR 64.7(d))**

The AQD has also made the following changes to the ROP since the public comment period.

Page 39, EU-DEADNER special condition VI.5 has been changed from monthly to weekly records for the inspection and maintenance of the particulate control system.

Page 100, FG-POWERHOUSE special condition III.4 has been added the following as required in consent order AQD No. 4-2005:

4. When using coal, the permittee shall only use coal with a heating value that is greater than 11,000 BTU per pound to fire its powerhouse boilers. The heating values shall be the gross calorific value determined on a moist, mineral matter free basis. The moist, mineral matter free BTU/pound shall be calculated using the formula contained in the US Department of Energy, Form EIA-7A, Coal Production Report dated March 2002. This report is attached to Consent Order AQD No. 4-2005 as exhibit B and incorporated by reference. **(Consent Order AQD No. 4-2005)**

Page 114 has added the NO_x CEM and COM performance reporting to appendix 2.8B as follows:

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in FG-POWERHOUSE. Alternative formats must be approved by the AQD District Supervisor.

1. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F)
2. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and/or the summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

COMS

1. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to AQD. Within 30 days following the end of the calendar quarter, the results of the annual audit shall be submitted to the AQD.
2. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and/or the summary report in an acceptable format to Air Quality Division, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

All monitoring data is shall be kept on file for a period of at least five years and made available to the AQD upon request.