## Michigan Department of Environmental Quality Air Quality Division

State Registration Number M4734

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number
MI-ROP-M4734-2011

Ford Motor Company - Automatic Transmission New Product Center

SRN: M4734

Located at

35500, Plymouth Road, Livonia, Michigan 48150

Permit Number: MI-ROP-M4734-2011

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 Natural Resources and Environment (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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## RENEWABLE OPERATING PERMIT

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May 23, 2011 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:	35500 Plymouth Road Livonia, Michigan 48150
Source Registration Number (SRN):	M4734
North American Industry Classification System (NAICS) Code:	541712
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201100013
Responsible Official:	Dave Poe, Program Manager 313-399-8777
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182
Date Permit Application Received:	January 26, 2011
Date Application Was Administratively Complete:	January 26, 2011
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	May 23, 2011
Deadline for Public Comment:	June 22, 2011

## **Source Description**

Ford Motor Company's Automatic Transmission New Product Center (ATNPC) is located in the City of Livonia, County of Wayne, on the north side of Plymouth Road, west of Wayne Road. This area is primarily commercial and industrial, with the nearest residential area approximately 1000 feet to the south.

ATNPC tests transmissions for vehicles manufactured by the Ford Motor Company. Testing is performed in any of approximately 50 test cells. Each test cell consists of an internal combustion engine and a dynamometer, which measures the mechanical performance of the attached transmission. The emissions that result from testing are due to the combustion of gasoline and diesel fuel in the engines.

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)	467.9
Lead (Pb)	not reported
Nitrogen Oxides (NO <sub>x</sub> )	46.2
Particulate Matter (PM)	3.5
Sulfur Dioxide (SO <sub>2</sub> )	3.0
Volatile Organic Compounds (VOCs)	17.4
Individual Hazardous Air Pollutants (HAPs) **	Not Calculated
Total Hazardous Air Pollutants (HAPs)	Not Calculated

<sup>\*\*</sup>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 Particulate Matter PM2.5.

Wayne County is currently designated by the U.S. Environmental Protection Agency (USEPA) as a non-attainment area with respect to the PM 2.5 standard.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because the potential to emit carbon monoxide exceeds 100 tons per year.

FG-PHASE3 at the stationary source was subject to review under the Prevention of Significant Deterioration regulations of because at the time of New Source Review permitting the potential to emit of carbon monoxide was greater than 250 tons per year.

EU-UST1 at the stationary source are subject to the New Source Performance Standards for Volatile Organic Liquid Storage Vessels promulgated in 40 CFR, Part 60, Subparts A and Kb.

EU-GASDISPENSING, EU-UST1, EU-UST2A, EU-VEHICLEREFUEL, EU-EEF1, EU-EEF2, EU-EEF3, EU-EEF4, and EU-PHASE3 at the stationary source are subject to the Maximum Achievable Control Technology Standards for gasoline dispensing facilities promulgated in 40 CFR, Part 63, Subparts A and CCCCCC.

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-M4734-2006 are identified in Appendix 6 of the ROP.

PTI Number			
401-94A	C-11388-11393	292-05	

## **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	Description of	ROP	PTI Permit
<b>Emission Unit ID</b>	Exempt Emission Unit	Exemption	Exemption
EU-RTACU	Rooftop heating units. The total design capacity of all heating units is approximately 30 million BTU's per hour.	R336.1212(4)(b)	R336.1282(b)(i)
EU-EXEMPT MACHINING	Machining equipment and any associated collectors.	R336.1212(4)(c)	R336.1285(I)(vi)

## **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 DNRE

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 Mr. 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.

## Michigan Department of Environmental Quality Air Quality Division

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M4734

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## August 2, 2011 STAFF REPORT ADDENDUM

## **Purpose**

A Staff Report dated May 23, 2011, 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:	Dave Poe, Program Manager 313-399-8777
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182

#### **Summary of Pertinent Comments**

## **Company Comment:**

**D. FLEXIBLE GROUP CONDITIONS - FLEXIBLE GROUP SUMMARY TABLE**: For Emission Unit EU-PHASE2, the description should be revised to reflect that the Phase 2 Chassis Rolls are included as part of the Phase 2:

"All dynamometers and chassis rolls in Phase 2 that are exempt from Rule 201 pursuant to R285(g). Total maximum design capacity of all dynamometers in Phase 2 is 3,312,000 BTU/hr."

The Associated Emission Unit IDs should also include EU-CHASSISROLLS.

#### **AQD Response:**

The AQD has included EU-CHASSISROLLS in the description of EU-PHASE2 for R285(g) exempt equipment.

## **Company Comment:**

**FG-PHASE2 - DESCRIPTION**: The description should be revised to include the chassis rolls that are included as part of this emission unit as follows:

"Dynamometer testing facilities that include 21 engine driven dynamometer test cells and chassis rolls, Phase 2, that are exempt from Rule 201 pursuant to R285(g). Total maximum design capacity of all dynamometers in Phase 2 is 3,312,000 BTU/hr."

## **AQD Response:**

The AQD has included EU-CHASSISROLLS in the description of FG-PHASE2 for R285(g) exempt equipment.

## **Company Comment:**

FG-PHASE2 - Emission Units: The list of emission units should include EU-CHASSISROLLS

## **AQD Response:**

The AQD has included EU-CHASSISROLLS in the list of emission units.

## **Company Comment:**

**FG-PHASE2 - II. MATERIAL LIMITS**: The Equipment column should also include EU-CHASSISROLLS.

#### **AQD Response:**

The AQD has included EU-CHASSISROLLS in the equipment column for material limits.

## **Company Comment:**

**FG-PHASE3 - VI. MONITORING/RECORDKEEPING, 3.**: The word "sulfur" should be capitalized for Condition 3.e.

## **AQD Response:**

The AQD has capitalized the word "Sulfur".

## **Company Comment:**

**FG-GASOLINE DISPENSING** >10,000 GALLONS AND <100,000/MONTH FLEXIBLE GROUP CONDITIONS: The Flexible Group Name should be greater than or equal to 10,000 gallons, not just greater than in the name as follows: 10,000 GALLONS AND < 100,000/MONTH.

## **AQD Response:**

The AQD has changed the name to say greater than or equal to 10,000 gallons. Note, this change may not appear in the table of contents because the macro does not recognize the underline function.

#### **Company Comment:**

**FG-GASOLINE DISPENSING** >10,000 GALLONS AND <100,000/MONTH FLEXIBLE GROUP CONDITIONS - DESCRIPTION: The description should be amended to add the sentence "However, the equipment used for the refueling of motor vehicles is not covered." at the end of the description.

#### **AQD Response:**

The AQD has added the following statement to the end of the description:

"The equipment used for the refueling of motor vehicles is not covered by this subpart (63.11112)"

## **Company Comment:**

**FG-GASOLINE DISPENSING >10,000 AND <100,000/MONTH - VII. REPORTING 4.**: Ford has already submitted these notifications as required by the regulation. Therefore, this condition can be deleted as there are no further actions required to satisfy this condition.

## **AQD Response:**

The AQD understands Ford has already submitted the required notifications. After further review of the regulation the Underlying Applicable Requirement has been changed from 40 CFR 63.11117(a)(1) to 40 CFR 63.11124(a)(1). Also, the condition will remain in the ROP in case the tanks become subject to the control requirements in 63.11117 and not excluded by SC VII.6 below, then a notification would be required.

## **Company Comment:**

**FG-GASOLINE DISPENSING <10,000/month - IX. OTHER REQUIREMENTS, 1.**: The template was developed to ensure compliance with the MACT Standard by identifying all of the requirements that are expected to be met. By adding this condition to the template, it is not clear what additional actions MDEQ expects Ford to undertake in order to be in compliance.

Ford believes that the templates developed for the Gasoline Dispensing MACT Standards (40 CFR Part 60, Subpart CCCCC) that are incorporated into the ATNPC Title V Permit identify all of the applicable requirements to which the gasoline dispensing facility is subject. Therefore, Ford believes that Condition IX. OTHER REQUIREMENTS, 1. in this flexible group template is unnecessary and adds confusion as to what other requirements could be applicable outside of the template. Additionally, these conditions may violate the Title V (40 CFR Part 70) requirements should the condition automatically incorporate future regulatory amendments of those MACT Standards.

If MDEQ believes any applicable requirements are missing from the templates, Ford believes that those requirements should be identified and incorporated into the ROP now to avoid any confusion as to what Ford is required to comply with for the Gasoline Dispensing MACT Standard. The purpose of the template was to clearly identify all applicable requirements for both Ford, MDEQ, and the public. Therefore, this condition should be deleted from this flexible group.

## **AQD Response:**

The language that has been requested for deletion is standard language in all AQD MACT templates. The AQD is leaving the standard language in the ROP to be consistent with all ROP MACT templates. No changes made.

## **Company Comment:**

**E. NON-APPLICABLE REQUIREMENTS**: For EURTACU, the name of the NESHAP Standard is incorrect, the correct name is "40 CFR 63 - Subpart JJJJJJ NESHAPS for Industrial, Commercial, and Institutional Boilers". Process heaters are not regulated under the Area Source Boiler NESHAP and the NESHAP name does not include the phrase "process heaters".

## **AQD Response:**

The AQD has removed the phrase "process heaters".

## **Company Comment:**

**Appendix 4. Recordkeeping**: For the paragraph discussing prorating lead usage, the reference to a daily limit is incorrect as the lead usage limit is a weekly limit. This paragraph should be revised as follows:

"Should the prorated weekly lead usage rate exceed 90% of the weekly limit, the permittee shall commence weekly recordkeeping for a minimum of two months until the prorated rate falls below 90% of the weekly limit as calculated at the end of the month."

## **AQD Response:**

The AQD has changed the wording to "weekly".

## **Company Comment:**

**E. NON-APPLICABLE REQUIREMENTS**: For SOURCE-WIDE, the name of the NESHAP Standard is incorrect, the correct name is "40 CFR 63 - Subpart PPPP NESHAPS for Engine Test Cells/Stands".

## **AQD Response:**

The AQD has corrected the name for the NESHAP standard.