

Michigan Department of Natural Resources &
Environment
Air Quality Division

State Registration Number
B2767

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B2767-2011

Chrysler Warren Truck Assembly

SRN: B2767

Located at

21500 Mound Road, Warren, Michigan 48091

Permit Number: MI-ROP-B2767-2011

Staff Report Date: July 5, 2010

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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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:	Chrysler Warren Truck Assembly 21500 Mound Road Warren, Michigan 48091
Source Registration Number (SRN):	B2767
North American Industry Classification System (NAICS) Code:	336112
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800069
Responsible Official:	Kenneth A. Brune, Plant Manager 586-497-2500
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182
Date Permit Application Received:	June 2, 2008
Date Application Was Administratively Complete:	June 16, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	July 5, 2010
Deadline for Public Comment:	August 4, 2010

Source Description

Chrysler Warren Truck Assembly Plant located in Warren Michigan.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2008** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	59.1
Lead (Pb)	0.0
Nitrogen Oxides (NO _x)	57.8
Particulate Matter (PM)	2.5
Sulfur Dioxide (SO ₂)	0.2
Volatile Organic Compounds (VOCs)	518.0
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 Macomb County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants except PM 2.5.

Macomb 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 Volatile Organic Compounds 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 Rule 220 for Major Sources Impacting Nonattainment Areas at the time of New Source Review permitting.

EU-Uniprime, EU-Tutone, EU-Color One, EU-Color Two and EU-Reprocess at the stationary source are subject to the New Source Performance Standards for Automobile and Light Duty Truck Surface Coating Operations promulgated in 40 CFR, Part 60, Subparts A and MM.

EU-Tempboilers at the stationary source are subject to the New Source Performance Standards for Small Industrial Commercial-Institutional Steam Generating Units promulgated in 40 CFR, Part 60, Subparts A and Dc.

EU-Uniprime, EU-Solvent Wipe, EU-Antichip, EU-Color One, EU-Color Two, EU-Reprocess, EU-Sealers&Adhesiv, EU-Blackout Booth, EU-Tutone, and EU-Final Repair at the stationary source are subject to the Maximum Achievable Control Technology Standards for the Surface Coating of Automobiles and Light-Duty Trucks promulgated in 40 CFR, Part 63, Subparts A and IIII.

Methanol storage tanks at the stationary source are subject to the Maximum Achievable Control Technology Standards for Organic Liquids Distribution (Non-Gasoline) promulgated in 40 CFR, Part 63, Subparts A and EEEE.

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

EU-Uniprime, EU-Color One, EU-Color Two, and EU-Tutone at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 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.

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-B2767-2003b are identified in Appendix 6 of the ROP.

PTI Number			
480-84	485-84	467-84b	468-84a
470-84a	471-84a	214-96	489-84
473-84	474-84	497-84	499-84
498-84	339-99	483-84	484-84
757-87a	488-84	496-84	464-84a
465-84	495-84	461-84	462-84
188-01			

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-Space Heat	Natural gas fired space heaters.	Rule 212(4)	Rule 282(b)(i)
EU-Diesel Generators	Two diesel generators used in SMB Paint Shop for emergency power.	Rule 212(4)	Rule 285(g)

Draft ROP Terms/Conditions Not Agreed to by Applicant

The following table lists terms and/or conditions of the draft ROP that the AQD and the applicant did not agree upon and outlines the applicant’s objections pursuant to Rule 214(2). The terms and conditions that the AQD believes are necessary to comply with the requirements of Rule 213 shall be incorporated into the ROP.

Emission Unit/ Flexible Group ID	Permit Term(s) and/or Condition(s) in Dispute	Applicant’s Objection
EU-Uniprime	Section III. Process/Operational Restrictions SC. 1.	Replacement oxidizer was exempt from a PTI so the temperature in the original permit did not have to be modified.

The AQD had changed the monitoring temperature to reflect the most recent acceptable performance test that demonstrated the new replacement oxidizer was operating properly. Chrysler may elect to conduct a new performance test at a lower temperature which demonstrates compliance with the permit condition and/or the original PTI’s requirement.

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 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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October 6, 2010 STAFF REPORT ADDENDUM

Purpose

A Staff Report dated July 5, 2010, 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:	Kenneth A. Brune, Plant Manager 586-497-2500
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-241-2182

Summary of Pertinent Comments

Company Comment:

1) EU-MechWasher (Pages 16-17)

Section VI. Monitoring/Recordkeeping Language currently reads differently than similar emissions units with the same permit requirements. Please revise Condition 1.e. to be consistent with that of EU-Solvent Wipe which reads as follows:

1. e. Calculations showing the VOC emission rates, in pounds per hour and tons per 12-month rolling time period, as determined at the end of each calendar month as outlined in Appendix 7, or an alternative that is acceptable to the District Supervisor

AQD Response:

The AQD has made the change.

Company Comment:

2) EU-Uniprime (Pages 18-21)

The following changes are requested.

Section III. Process/Operational Restrictions reads as follows:

The permittee shall not operate EU-Uniprime unless the associated thermal oxidizer for the ovens is installed and operating properly. Proper operation of the thermal oxidizer includes maintaining a minimum 3-hour average combustion chamber temperature no more than 50 degrees Fahrenheit below

1450 °F or the average combustion chamber temperature during the most recent acceptable performance test that demonstrated the equivalent destruction efficiency and has been accepted by the AQD District Supervisor.2 (R 336.1910, 64.6(c)(i)&(ii))

The requirement to maintain the oxidizer at 1450 °F was newly instituted during this renewal process and is excessive. We are requesting that the condition be revised to reflect the 1337 °F specified in the original ROP. Although the oxidizers were replaced by a new RTO, Michigan's rule R 336.1285 (d) exempts the "*Reconstruction or replacement of air pollution control equipment with equivalent or more efficient equipment.*" Therefore, the temperature in the original permit is still valid and did not have to be modified.

AQD Response:

The AQD has added the 1450 F temperature requirement based upon the most recent acceptable performance test that was done for the RTO. The AQD has also added the Rule 213(3) citation to this permit condition as it is necessary to assure the control device is operating properly in accordance with its most recent performance test.

Company Comment:

2) EU-Uniprime (Pages 18-21)

Section V. Testing/Sampling reads as follows:

The VOC content, water content and density of any **cleaner and inhibitors** material...

This condition should refer to the **coatings** used in the Ecoat system rather than cleaners and inhibitors used in another emissions unit.

AQD Response:

The AQD has deleted the reference to "cleaner and inhibitors".

Company Comment:

2) EU-Uniprime (Pages 18-21)

Section VI. Monitoring/Recordkeeping Item 4 requires the development and implementation of a "CAM O&M Plan" and Section IX. Other Requirement(s) also requires an "O&M Plan" for the same emissions unit and control device. We are therefore requesting that these permit conditions and the required plans both be combined such that the one O&M plan must contain the requirements set forth in Items 2. And 3. Of Section IX.

The same request applies to the following emissions units or flexible groups:

EU-Tutone Section VI. Item 9 with Section IX. Items 2. and 3.

FG-Topcoat Section VI. Item 11 with Section IX. Items 2. and 3.

AQD Response:

The AQD has deleted the duplicative conditions in Section IX.2 for each Emission Unit and Flexible Group listed.

Company Comment:

3) EU-Tutone (Page 29-33)

Section IX.3 (Other Requirements) – We are requesting the following additional language to clarify that, unlike the Topcoat 1 and 2, the nature of this operation is more sporadic because not every vehicle will be painted in the Tutone booth:

3. For the purposes of Compliance Assurance Monitoring (CAM), excursions will be defined as follows: **(64.6(c)(2))**
 - a. A temperature excursion is defined as a confirmed three-hour period while painting production units in the Tutone System and during which the average fails to meet the most recently acceptable performance test value.

AQD Response:

No change made, the AQD acknowledges that the oxidizers are expected to be up to temperature and properly functioning while EU-Tutone is operating (i.e. See SC III.1). If Chrysler is not operating EU-Tutone, then special condition III.1 would not require that the oxidizer be operating during that time frame.

Company Comment:

4) FG-Topcoat (Pages 58-63)

Section I.1, (Emission Limit(s) table). As presented, each individual emissions source within the group continues to have source specific lbs/hr and TPY VOC limits for each booth and each oven of each painting operation. It is Chrysler's understanding that the purpose of grouping similar sources into a "Flexible Group" is to streamline permit conditions and combine multiple limits into a single group limit. Michigan's Rule 212 states the following:

Rule 212. (5) As a part of an application for a renewable operating permit, a person may seek to establish that certain terms or conditions of a permit to install, permit to operate, or order entered pursuant to the act are not appropriate to be incorporated into the renewable operating permit or should be modified to provide for consolidation or clarification of the applicable requirements. An application for a renewable operating permit may include information necessary to demonstrate any of the following:

(c) That the equipment should be combined into emission units different from the emission units contained in a permit to install, permit to operate, or order entered pursuant to the act to provide for consolidation or clarification of the applicable requirement. A person shall demonstrate that the realignment of the emission units results in enforceable applicable requirements which are equivalent to the applicable requirements contained in the original permit or order and that the equivalent requirements do not violate any other applicable requirement.

Chrysler requests that the Tutone operation be included in the flexible group FG-Topcoat. All the in-line topcoat operations share the same performance limit of 12.3 lbs/GACS as required by the Auto Topcoat Protocol. Therefore including the Tutone operation in the Topcoat flexible group meets the regulatory intent of the NSPS and LAER determination.

We are also requesting further consolidation of the Topcoat emissions limits. Currently, there are eight (8) individual VOC emissions limits for the EG-COLOR-ONE and EG-COLOR-TWO paint lines that regulate each spray booth and each bake oven separately. Chrysler requests that the eight limits be combined into a short-term and long-term VOC limit of 553.6 lbs/hr and 1195.56 TPY, respectively for the main color system. Since these booths were permitted and installed under the same permitting action and there was no regulatory requirement that each part of the emission unit be separately limited, the combining of the pieces of the whole emission unit would better reflect the intent of the surface coating regulatory requirements as well as all other permits that have been issued to similar sources in Michigan and other states. This combination is a simple addition of the limits of each booth and oven and does not constitute a material change in those established in the original permitting action.

In like manner, we further request that the four (4) Highbake Repair spray booth and bake oven emissions limits be combined into VOC limits of 92.2 lbs/hr and 198.86 TPY and the Tutone spray booth and oven limits be combined into a single lb/hr limit of 390.61 lbs/hr and 841.53 TPY VOCs as well.

AQD Response:

No change made. The AQD does not have the authority to consolidate emission limits that were part of a Permit to Install LAER determination through the Title V renewal process. By combining the emission limits as suggested, each individual emission unit would then be allowed to exceed its original emission limit established under LAER. A Permit to Install would be required to modify and/or re-establishment the LAER limits within this ROP.