

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number

RENEWABLE OPERATING PERMIT

ROP Number

P0374

MAY 12, 2017 - STAFF REPORT ADDENDUM

MI-ROP-P0374-20XX

Purpose

A Staff Report dated March 6, 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 Officials Section 1:	Daniel D. Hartzler, Vice President of Engineering 616-965-9470 Paul DeHart, Chief Operating Officer 616-965-3422
Responsible Official Section 2:	Dalton Blackwell, Vice President 616-559-0032
AQD Contact:	Kaitlyn DeVries, Environmental Quality Analyst 616-356-0003

Summary of Pertinent Comments

Several comments were received from EPA during the comment period. Comments were received on April 5, 2017.

EPA Comment 1: Additional information was requested to provide information that the facility-wide potential to emit (PTE) limitations of 9.9 tons per year (TPY) for each individual HAP and 24.9 tpy for aggregate HAPs, both based on a 12-month rolling time period, account for all HAP and VOC emission from the facility, and are enforceable in a practical manner.

AQD Response: In accordance with AQD's standard procedures, facility-wide HAP limits were established through the New Source Review (NSR) process and included all relevant information in the review to support the facility-wide limitations. Per the evaluation document supporting PTI No. 130-12A, where the limits were first established, modifications were made to the original wording of the facility-wide limits after a comment was received from EPA, and was deemed acceptable.

FGMACTPPPP, which covers EUPAINTLINE-1, EUPAINTLINE-2, EUADHESIVE, and EUSPOTPRIME has an organic HAP content limit of 0.016 lbs. per lb. of coating solids. The facility has been using the compliant material option to maintain compliance with 40 CFR Part 63 Subpart PPPP, thereby limiting the HAP content to what was previously mentioned and does not allow any organic HAP in any thinner, additive, or cleaning material. Compliance with the limits established in this flexible group as well as the conditions outlined elsewhere in these emission units and FGPAINT, make the emission limitations enforceable in a practical manner.

EUCARBONMOLD, EUADHESIVE, FGPAINT, and EUPULTRUSION have VOC limitations and were included in the PTE calculations for VOC emissions from the facility. FGPAINT requires the usage of the

RTO when operating. This additional control has also been added since the HAP limits were accepted and established through the NSR PTI. An RTO has been added to control emission from EUPAINTLINE1 and testing has established a capture efficiency of 98.2% and a destruction efficiency of 95%. FGPAINT and FGCAMPLAN establish operational restrictions for the RTO, to ensure proper capture and destruction occurs, thus further making the emission limits enforceable in a practical manner.

No changes were made in response to this comment.

EPA Comment 2: The source-wide conditions for both sections include blanket individual and aggregate HAP facility-wide emission limits of 9.9 TPY and 24.9 TPY, 12-month rolling, and general emission calculation requirements. Although the permit conditions state that the limits apply to all equipment at the facility, the draft permit does not address the following:

1. How the limits relate to individual emission units, types of units, and activities at the facility;
2. How the emissions shall be calculated, taking into account all units and activities;
3. The monitoring and recordkeeping requirements for the units that do not calculate HAP emissions on a mass balance basis, such as combustion units and units relying on control equipment.

The comment requests that further information be provided on how emissions are determined or measured to assure compliance with these limits.

AQD Response: In the source-wide emissions section, Special Condition V.1 requires EPA test method 311 or use of manufacturer's formulation data for HAP content verification of all HAP containing material and Special Condition VI.2, of that section requires that records be kept showing gallons or pounds of each HAP containing material used. The emission limitations apply to *"all process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment"*. Since this flexible group covers all emission units, the permittee shall include all emissions calculations from such items as boilers, generators, and other exempt emission units, including those exempt pursuant to Michigan Rule 212(4). Additionally, the condition has been updated to include any future emission units in this emission limit in this calculation as well.

Special Condition VI, for monitoring/recordkeeping has been updated to state the permittee shall keep records using mass balance, or an alternative format that is acceptable to the AQD District Supervisor. Additionally, Appendix 4 has been updated to include a sample calculation for mass balance with the option of including a control efficiency, where appropriate.

EPA Comment 3: EUCARBONMOLD, EUADHESIVE, FGPAINT, and EUPULTRUSION include ton or pound per year VOC emission limits, on a 12-month rolling time period basis. Although the permit conditions require recordkeeping and calculations to determine compliance with the limits, the permit does not specify the calculation methods.

AQD Response: Additional information was added to each of the aforementioned emission units and flexible groups identifying that mass balance shall be used to calculate emissions, or a format that is acceptable to the AQD District Supervisor. Additionally, Appendix 4, identifying appropriate recordkeeping, was updated to include a sample mass balance calculation.

EPA Comment 4: For EUADHESIVE, Special Condition II.1 and 2, a "footnote 2", which is federally enforceable, is included with an underlying applicable requirement of Rule 225, which is state only enforceable.

AQD Response: The underlying applicable requirement of Rule 225 is correct, and the footnote should be a "footnote 1". This has been updated in the ROP.

EPA Comment 5: FGPAINT, Special Condition II.1 - II.4 identifies EUPAINTLINE-2 as the equipment subject to the instantaneous VOC content requirements, however, the asterisk noted in the table states that the VOC content requirements apply per coating per line.

AQD Response: The instantaneous VOC content for the coatings applies to all coatings on EUPAINTLINE-2 only. EUPAINTLINE-2 is uncontrolled, and the VOC content requirements are required to comply with the applicable Part 6 rules, as per Rule 702(d). An update to the asterisk was made specifying that the limit applies to coatings on EUPAINTLINE-2 only.

EPA Comment 6: In FGPAINT, the Regenerative Thermal Oxidizer (RTO) for EUPAINTLINE-1 requires a 92.5% capture efficiency, 95% destruction efficiency, and a 0.5 second minimum retention time. Address how the permit assures compliance with these conditions and in accordance with 40 CFR 70.6(c)(1).

AQD Response: The RTO that controls EUPAINLINE-1 was required to verify the 92.5 % capture efficiency and 95% destruction efficiency within 180 days of completion the trial run of the RTO. Appropriate testing has since been conducted, with test results indicating a 98.9% capture efficiency and a 98.0% destruction efficiency. Both indicators shall be evaluated at least every five (5) years and prior to the expiration of the ROP. Additionally, the retention time set in the permit is based on the manufacturer's information. No changes were made to the ROP as a result of this comment.

EPA Comment 7: FGPAINT includes a minimum temperature of 1500°F, or the minimum temperature from the most recent acceptable stack test, for the oxidizer. However, FGCAMPLAN sets the Compliance Assurance Monitoring indicator range for the oxidizer at a minimum temperature of 1400°F. The comment requests justification, in the staff report, ensuring the indicator provides a reasonable assurance of ongoing compliance with the VOC emission limit and control standards in accordance with 40 CFR 64.3(a)(2).

AQD Response: The most recent stack testing indicated an operational range in the mid to low 1500°F range. FGCAMPLAN has been updated to reflect the correct 1500°F minimum temperature. Additionally, per the facility's RTO Malfunction Abatement Plan (MAP), the facility plans on operating the oxidizer at a minimum temperature of 50°F above the minimum permitted value, and will trigger the oxidizer's interlock system if the temperature drops below that value.

EPA Comment 8: FGNSPSJJJJ indicates EUGENERATOR-2 is subject to the Reciprocating Internal Combustion Engines MACT, Subpart ZZZZ in addition to Subpart JJJJ. The comment requests that all applicable regulations and subsequent requirements be addressed in the permit.

AQD Response: EUGENERATOR-2 is subject to the Reciprocating Internal Combustion Engines MACT, Subpart ZZZZ, but per 40 CFR 63.6590(c), an affected source that meets the requirements of paragraphs (c)(1) through (7) of 40 CFR 63.6590 must meet the requirements of 40 CFR Part 60, Subpart JJJJ, and no further requirements apply for such engines under Subpart ZZZZ. Thus, the requirements of Subpart JJJJ have been incorporated into the permit, and meet all requirements of Subpart ZZZZ. No changes were made to the ROP as a result of this comment.

Changes to the March 6, 2017 Draft ROP

In response to EPA Comment 2 and 3, Appendix 4, for both sections has been updated to include a sample mass balance calculation as listed below, and emission units using a control efficiency were identified.

Example Mass Balance Equation to be used where appropriate, or an alternate calculation approved by the AQD District Supervisor:

$$\frac{\text{Pounds of VOC emitted}}{\text{Year}} = \frac{\text{Pounds of VOC}}{\text{Gallon of Coating}} * \frac{\text{Gallons of Coating Used}}{\text{Year}} * \text{Control Efficiency}^a$$

^a A control efficiency should only be used where appropriate.

Also in response to EPA Comment 2, the source-wide conditions description has been updated to include any future equipment, thereby including any future equipment installation into this emission limit.

In response to EPA comment 5, an update was made to the asterisk in FGPAINT Special Condition II.1 and II.2 specifying that the limit applies per coating to EUPAINTLINE-2 only.

The temperature requirement in FGCAMPLAN was updated to correctly indicate 1500°F, in response to EPA Comment 7.