
FCA US, LLC

RESPONSE TO COMMENTS DOCUMENT

August 26, 2019

PERMIT No. 13-19A



Gretchen Whitmer, Governor

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Michigan Department of
Environment, Great Lakes, and Energy**

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I. PUBLIC PARTICIPATION PROCESS

Permit to Install (PTI) application No. 13-19A, for FCA US, LLC, is for the installation of a new automotive paint shop and modifications to an existing automotive assembly line located at 21500 Mound Road, Warren, Michigan. The public participation process involved providing information for public review including a fact sheet, proposed permit terms and conditions, a public comment period, an informational meeting, a public hearing, and the receipt of written public comments on staff's analysis of the application and the proposed permit.

On July 17, 2019, copies of the Notice of Air Pollution Comment Period and Public Hearing, the Technical Fact Sheet, the Proposed Project Summary, and the draft terms and conditions were placed on the Michigan Department of Environment, Great Lakes, and Energy (EGLE or Department), Air Quality Division (AQD) Home Page (<https://www.michigan.gov/air>). Also on that date, the AQD mailed 38 letters to persons who had previously expressed interest via letter and had provided a complete address. In addition, a notice announcing the Public Comment Period, Public Informational Meeting, and Public Hearing was placed in the Warren Weekly. The notice provided pertinent information regarding the proposed action; the locations of available information; a telephone number to request additional information; the date, time, and location of the Public Informational Meeting and Public Hearing; the closing date of the Public Comment Period; and the address where written comments were being received.

The Informational Meeting was held on August 19, 2019, at the Warren Community Center cafeteria, 5460 Arden Avenue, Warren, Michigan. This location was selected due to its proximity to the facility and the size of the room. Approximately seven people attended the Informational Meeting. A panel of representatives from the AQD were available to answer questions regarding the proposed project. The meeting began at 5:30 p.m. and concluded at approximately 7:00 p.m.

The Public Hearing was held on August 19, 2019, directly following the Information Meeting at the same location. The hearing began at 7:00 p.m. with Tracy Kecskemeti as the Hearings Officer and Dr. Eduardo Olaguer as the Decision Maker. Only comments on the proposed permit action were to be received. In addition, AQD was available outside the cafeteria to answer any questions. Approximately seven people attended the Public Hearing with none providing oral comments. The Public Hearing concluded at 7:15 p.m. Only one set of written comments was received during the Public Comment Period and the Hearing.

The remainder of this document is a listing of the significant comments received during the Public Comment Period and Hearing regarding the proposed permit and the Department's response. The first section discusses the comments received that resulted in changes to the final permit terms and conditions and the basis for each change. The last section discusses the Department's response to all other significant comments that did not result in changes to the final permit.

II. SUMMARY OF COMMENTS RESULTING IN CHANGES TO THE PERMIT

Comment

Multiple conditions require testing every five years unless an annual demonstration is done to show that the most recent test is still valid. The wording on these conditions is inconsistent with

some conditions requiring “submittal”, some requiring “maintained”, and some requiring that the demonstration is “documented.” These conditions should be consistent.

AQD Response

The AQD agrees that these conditions should be worded consistently. The most recent wording for similar conditions has required that the applicant “...documents annually’ that the most recent acceptable test remains valid and representative.” Therefore, the wording in all conditions that include this wording has been changed to “documents annually.”

Condition Change

This change was performed in the following emission unit (EU) or flexible group (FG) special conditions (SC):

EUECOATWEST - SC V.2, EUPRIMERWEST – SC V.2, V.4, and V.5, EUTOPCOATWEST – SC V.2, V.4, and V.5, EUSPOTREPAIRWEST – SC V.2, EUECOATEAST, SC V.2, EUSPOTREPAIREAST – SC V.2, FGTOPCOATEAST, SC V.5, FGSPOTPRIMEWEST – SC V.2, FGRTOWEST – SC V.1 and V.2, FGRTOEAST – SC V.1 and V.2, FGBOILERS – SC V.1 and V.2, FGFACILITY – SC V.1 and V.2

Comment

There are various editorial errors in the draft permit.

AQD Response

The AQD agrees that there were some typographical and nomenclature errors that require correcting.

Condition Change

The various editorial errors were corrected. These corrections were performed in the following special conditions:

EUECOATWEST - SC V.2, EUTOPCOATWEST – SC IV.2, EUPURGECLEANEAST – SC IX.2, FGCONTROLS – Pollution Control Equipment description

Comment

There were various clarifications and/or corrections proposed with regards to special conditions as well as emission unit, flexible group, and pollution control equipment descriptions.

AQD Response

The AQD agreed with the proposed clarifications to those conditions and incorporated the suggested changes.

Condition Change

The following descriptions were changed to provide clarification or correct nomenclature:

EUECOATEAST – EU Description, EUPRIMERWEST – Pollution Control Equipment, EUECOATWEST – SC IV.2, EUSEALERS – SC VIII.2, EUTUTONE – SC IX.1, FGRTOEAST – FG Description, FGCONTROLS – Pollution Control Equipment, FGAUTOMACT – Pollution Control Equipment

In addition, the following conditions were removed, as they were deemed as not applicable or were repetitive:

EUECOATWEST – SC VI.5, EUSPOTREPAIREAST – SC VI.2, EUFINALREPAIR – SC VI.2

Comment

There are operational requirements that only refer to “FGCONTROLS” when specifying the control equipment that must be operating for specific processes. These requirements should identify the specific control equipment.

AQD Response

The AQD agrees that clarification is needed with regards to which control equipment must be operating for the processes specified.

Condition Change

The following SCs were changed to specify whether the specific process is controlled by the west concentrator and west regenerative thermal oxidizer (RTO), or the east concentrator and east RTO:

West Concentrator and West RTO: EUPRIMERWEST – SC IV.1, EUTOPCOATWEST – SC IV.1, EUPURGECLEANWEST – SC IV.1

East Concentrator and East RTO: EUPURGECLEANEAST – SC IV.1, FGTOPCOATEAST – SC IV.3

Comment

EUFINALREPAIR, SC IX.2 states that this EU must comply with 40 CFR Part 60, Subpart A and MM. This SC should be removed because a final repair process is not subject to these requirements.

AQD Response

The AQD agrees that final repair processes are not subject to 40 CFR Part 60, Subparts A and MM.

Condition Change

EUFINALREPAIR, SC IX.2 was removed.

Comment

EUECOATWEST, SC IV.2 has an incorrect reference to “SC VI.3” for the prep booth, as this condition refers to the RTO temperature monitoring device.

AQD Response

A weekly particulate matter (PM) control system visual inspection requirement was inadvertently omitted from EUECOATWEST.

Condition Change

The weekly PM control system visual inspection requirement was placed in EUECOATWEST as SC VI.3, which makes the reference in SC IV.2 correct.

The addition of this requirement also required renumbering SC IV.3 and IV.4 in EUECOATWEST. The reference in the ‘Monitoring/Testing Method’ column of the Emission Limits table for SC I.1 and I.2 in EUECOATWEST was changed from SC VI.4 to SC VI.5.

Comment

The PM, particulate matter equal to or less than 10 microns (PM10), and particulate matter equal to or less than 2.5 microns (PM2.5) emission limits, as established in FGTOPCOATEAST, are only applicable upon completion of the refurbishment of EU-COLOR-ONE. As currently written, those emission limits would become applicable upon issuance of the permit.

AQD Response

The AQD agrees that the referenced emission limits are not applicable until EU-COLOR-ONE has been refurbished, including the installation of control equipment.

Condition Change

An additional footnote, designated “1”, was placed onto SCs I.17, I.18, I.19, I.20, I.21, and I.22 of FGTOPCOATEAST, and added to the footnote list at the bottom of the table. The additional footnote reads: *“This emission limit shall be applicable upon startup of the refurbished EU-COLOR-ONE after control equipment has been installed”*

Comment

The newly added hourly oxides of nitrogen (NOx), PM10, and PM2.5 limits for the existing boilers, permitted in FG-BOILERS, appear to become applicable upon issuance of the permit limit. Because the basis for the limits is the minor source modeling demonstration, and the

demonstration incorporated the estimated emissions from the sources after completion of the project, the permit limits should not become applicable until after the completion of facility modifications.

AQD Response

The AQD agrees that the NO_x, PM₁₀, and PM_{2.5} limits on the existing boilers do not become applicable until after completion of the facility modifications.

Condition Change

A footnote, designated "A", was placed on SC I.2, I.3, I.4, I.5, and I.6 of FGBOILERS, and added to the bottom of the table. The footnote reads "*This emission limit becomes applicable upon startup of the west paint shop.*"

In addition, the language for SC V.1 and V.2 for FGBOILERS must be changed from "*Within 180 days of permit issuance*", as these limits do not become applicable upon issuance of the permit. The language from these two conditions has been replaced with "*Within 365 days of saleable vehicle production from the west paint shop...*"

Comment

A comment was received to change the language for EUPRETREATWEST – SC II.1 to state that "*No materials in EUPRETREATWEST shall contain any VOCs or HAPs that are emitted from the process.*"

AQD Response

The AQD agrees that the pretreating process uses materials that contain volatile organic compounds (VOCs) and hazardous air pollutants (HAPs), and that the respective VOCs and HAPs are compounds that have very low vapor pressures and are not expected to volatilize or emit under the operational conditions of the pretreatment process.

Recent permits for automotive pretreatment processes have been issued with similar language, with the requirement for a demonstration to show that any VOC and/or HAP compounds do not emit in the representative operating conditions.

Condition Change

SC II.1 was changed to the proposed language above. In addition, SC VI.2 was added to the permit, which states:

The permittee shall keep a record, acceptable to the AQD district supervisor, demonstrating that any VOC and/or HAP compounds contained in the EUPRETREATWEST materials will not be emitted at the representative operating conditions. (R 336.1225, R 336.1702, R 336.2908)

III. SUMMARY OF AQD COMMENTS RESULTING IN CHANGES TO THE PERMIT

AQD Comment

The updated FGTOPCOAT, named FGTOPCOATEAST, inadvertently omitted monitoring and recordkeeping requirements for the existing thermal oxidizers that control the bake oven portions of EU-COLOR-ONE, EU-COLOR-TWO, and EU-REPROCESS. These requirements are necessary for the enforceability of, and to allow the applicant to take credit for, the installation of the control equipment.

Condition Change

The language in FGTOPCOATEAST – SC VII.8 was changed to:

“The permittee shall install, maintain, and operate...the spray booth portions of EU-COLOR-ONE, and the thermal oxidizer in the bake oven portions of EU-COLOR-ONE, EU-COLOR-TWO, and EU-REPROCESS...”

AQD Comment

The majority of testing conditions throughout the permit allow for an annual demonstration that the most recent acceptable test remains valid and representative. However, that wording was inadvertently omitted from some testing conditions.

Condition Change

Language allowing for an annual demonstration was placed into the following conditions:

FGRTOWEST – SC V.1, FGRTOEAST – SC V.1, FGFACILITY – SC V.1

AQD Comment

A requirement for weekly visual inspections on all particulate control systems is present in all EUs and FGs that contain that type of control equipment. This requirement was inadvertently omitted from FGSPOTPRIMEWEST, which consists of spot prime processes in the west paint shop that use dry filter particulate control systems.

Condition Change

The following condition was added to FGSPOTPRIMEWEST as SC VI.4:

The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, or water wash particulate control system which include the dates and results of the inspections, and the dates and reasons for repairs. All records shall be kept on file and made available to the Department upon request. (R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))

IV. SUMMARY OF SIGNIFICANT COMMENTS

A. Air Toxics and Risk Assessment

Comment

A request was received to remove the flexible groups (FGs) FGNGWEST and FGNEWNGEAST. These FGs were created based on the TAC modeling demonstration in the original application that relied on the natural gas combustion equipment operating at a factor of less than 100% on an annual basis. An updated TAC analysis was provided based on the maximum capacity of all natural gas combustion units operating at 100% of capacity on an annual basis and the TAC impacts remained essentially unchanged.

AQD Response

FGNGWEST and FGNEWNGEAST contain natural gas usage limits based upon the submitted application and resulting TAC analysis. In addition, these flexible groups include requirements for installation of low-NO_x burners and filtration on the associated natural gas equipment that is not listed elsewhere in the permit; therefore, these FGs cannot be removed.

The updated TAC analysis discussed in the comment was not received by the AQD with enough time to review and verify that analysis prior to the start of the public comment period.

The AQD could review and verify the updated TAC analysis to remove the respective requirements from FGNGWEST and FGNEWNGEAST, but this process would constitute a relaxation in requirements as posted in the original public comment period. The updated analysis would also increase the overall allowable VOC emissions from the new (west) paint shop and an increase in the required offsets for the project. The resulting changes would require posting an updated proposed draft permit for an additional 30-day public comment period.

The applicant may submit another application in the future, at which point the updated TAC analysis can be reviewed. Please note, the natural gas equipment is part of a nonattainment permit review, and the proposed changes would affect offsets, an updated application would require the entire project to undergo review again, including an additional 30-day comment period.

B. Permit Requirements

General

Comment

A request was received to change the date for required shutdown of EU-COLOR-ONE for repair operations and installation of a concentrator and RTO, as listed in FGTOPCOATEAST – SC IX.4. The date was requested to be changed from March 28, 2020, to July 31, 2020, due to the potential for unforeseen construction or production scheduling changes.

AQD Response

This date was established during the permit review for PTI No. 13-19, as the offset permit associated with PTI No. 14-19 for the new FCA Mack Avenue Assembly Plant. However, the AQD understands that delays in construction or production can occur. This change has been deemed as acceptable, as the permit still requires that the required offsets have been realized, regardless of the actual shutdown date for EU-COLOR-ONE.

Comment

The draft permit proposes the modernization project results in the reclassification of the new and existing paint shops as being subject to the lower Auto MACT emission limits for new/reconstructed sources. FCA is not in agreement with this assessment and has provided to the AQD the basis for this position.

In accordance with 40 CFR 63.3082(e), the new paint shop is not considered new, as a previous automotive truck assembly plant has existed at this stationary source.

In accordance with 40 CFR 63.3082(f), the existing paint shop is not considered reconstructed, as the estimated cost of the refurbishment of the existing paint shop is \$218 million and the estimated cost of a new paint shop is \$535 million. The refurbished cost is less than 50% of the new paint shop and, therefore, does not constitute a reconstruction of the existing facility.

AQD Response

The AQD disagrees with how FCA conducted the reconstruction analysis (comparing an existing paint shop to a new paint shop) and would also need a more detailed cost break down on what equipment and costs were included. FCA has previously estimated (with no details provided) that a new paint shop would cost \$535 million, and that the modification to the existing paint shop was an estimated \$218 million.

The facility is currently an existing source prior to any modifications at the site. After modifications to the site, the facility will consist of a 2 paint shop/topcoat line facility. The AQD views the cost analysis as follows:

	Modifications to Existing Facility	New Paint Shop	Existing + New	New facility with two paint shops	Percentage
Cost (in Millions)	\$218	\$535	\$753	\$1070	70%

Based upon the information provided, the AQD believes the 50% rule for cost has been exceeded for this project and the facility will be considered a new facility upon start up. The AQD also considers this application to satisfy the notification requirements for reconstructed facilities under 40 CFR 63.5(b)(3) and 40 CFR 63.5(d).

Emissions

Comment

FCA notes that new pound per hour limits have been added in FG-BOILERS for NO_x, PM₁₀, and PM_{2.5} where currently (in the current Title V ROP) no such limits exist. As part of the application package, FCA provided a minor source modeling demonstration that was conducted in accordance with the United States Environmental Protection Agency's (USEPA) Appendix W dispersion modeling guidance. The boilers are considered nearby sources based on this guidance, as they are unaffected by the proposed project.

FCA believes that it is inappropriate to establish new short term emission limits for existing sources that are not being modified based on this modeling demonstration. A successful modeling demonstration that includes nearby sources does not necessitate nor mandate the establishment of limits for those nearby sources, even when modeling a major PSD modification. USEPA guidance on the use of Appendix W, in the form of their August 3, 2017, webinar content, supports this conclusion.

FCA notes that the powerhouse boilers are already subject to emission limits contained in the ROP that apply to oxides of nitrogen (NO_x) on a ton per year limit basis as well as a natural gas consumption limit specific to the powerhouse. The annual NO_x limit when compared to the combined hourly limits that have been proposed in the PTI are nearly the same (27.1 lbs/hr compared to 26.5 lbs/hr). The additional hourly emission limits based upon a modeling demonstration for sources that are not being modeled is inappropriate and is not supported by any applicable requirements. This is especially true in cases where there are multiple overlapping limitations on a complex-wide basis and in terms of each specific unit.

AQD Response

Each NO_x, PM₁₀, and PM_{2.5} emission rate for the four boilers in question is less than the capacity of the respective boiler and was used in the NAAQS and PSD Increment modeling analyses. Since there are no existing short-term limits on the boilers and the emission rates are less than full capacity for each boiler, new short-term limits, and the accompanying testing requirements, are necessary to ensure compliance with the NAAQS and PSD Increment for these three pollutants.

In addition, it is not uncommon for a piece of equipment that is not part of the proposed project to receive an emission limit based on a NAAQS or PSD Increment modeling analysis.

Comment

The emission unit EUPRETREATWEST is not subject to the Auto MACT emission limits, as it is a zinc phosphating metal surface treatment process (where the electrochemical process physically converts the metal surface) rather than a coating or cleaning process. It should not be included as part of FGAUTOMACT.

AQD Response

The AQD disagrees with FCA's position because of the following:

"40 CFR 63.3082

. . .

"(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1) All coating operations as defined in §63.3176."

. . ." (includes def.)

"63.3176:

. . .

Coating means a material applied to a substrate for decorative, *protective*, or functional purposes. Such materials include, but are not limited to, paints, sealants, caulks, inks, adhesives, primers, deadeners, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered coatings for the purposes of this subpart.

. . .

Paint shop means the collection of all areas at the facility in which new *automobile or new light-duty truck bodies*, or body parts for new automobiles or new light-duty trucks *are phosphated and coated* (including application, flash-off, drying and curing of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, glass bonding adhesive, deadener, adhesives and sealers); all coating operations added to the affected source pursuant to §63.3082(c); all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to §63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to §63.3082(c). If there is no application of topcoat to new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks at the facility, then for purposes of this subpart the facility does not have a paint shop.

. . ." (includes def.)

Phosphate systems have also recently been included in the MACT IIII portions of recent PTI's and ROP's during renewal over the last couple years. Alternatively, FCA may choose to petition EPA for a determination on the inclusion of Pre-Treatment under the Auto and Light-Duty Truck NESHAP.

Monitoring/Recordkeeping

Comment

EUECOATWEST – SC VI.3 contains a redundant requirement. An identical condition is repeated in FGCONTROLS, which is applicable to all thermal oxidizers installed at the facility. Redundant conditions appear in the following EUs:

EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EU-COLOR-ONE, EU-REPROCESS, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUFINALREPAIR, EUNEWNGASSEMBLY and EUNEWNGPSEAST.

The requirement makes more sense to be in FGCONTROLS, and the removal of all redundant requirements from each individual EU is suggested.

AQD Response

The various conditions require either the proper installation, maintenance, and operation of a temperature monitoring device in the associated thermal oxidizer, or a requirement to monitor the condition of each particulate control system through weekly inspections.

After reviewing the permit, FGCONTROLS does not have the requirement for the weekly inspection of the particulate control systems; those requirements must stay in EUECOATWEST (the requirement was placed into this EU based on a comment listed in Section II), EUPRIMERWEST, EUTOPCOATWEST, EUSPOTREPAIRWEST, EUFINALREPAIR, EUPWDRPRMEAST, EUSPOTREPAIREAST, FGTOPCOATEAST, FGSPOTPRIMEEAST (this requirement was added to this FG based on a comment listed in Section III), FGNGWEST, and FGNEWNGEAST.

FGCONTROLS does have the requirement for the proper installation, maintenance, and operation of a temperature monitoring device in all thermal oxidizers at the facility. However, the AQD does not view this redundancy as totally unnecessary. The placement of this requirement in each individual EU or FG, as well as in FGCONTROLS, will emphasize the importance of this requirement when reviewing the permit.

In addition, the permit has been reviewed to ensure that all references to specific SCs are correct. The removal of this number of conditions would require renumbering and reviewing all SC references in the various portions of the permit (example, an emission limit references SC VI.6 as the 'Testing/Monitoring Method,' but it would change to SC VI.5 with the removal of the repetitive condition). Given the size and scope of this permit, the repetitive nature of these conditions is of secondary importance to ensuring that the references to specific SCs are correct. Therefore, the AQD will not be removing these conditions as suggested.